



**Emak**<sup>®</sup> SPA

**OM106J - OM124J**

**EF106J - EF124J**

**(STARJET)**

**SATR 15,5 H**

**SATR 17,5 H**

**SATR 18 H**



**GB** User's manual

**D** Bedienungsanleitung

**F** Manuel d'utilisation

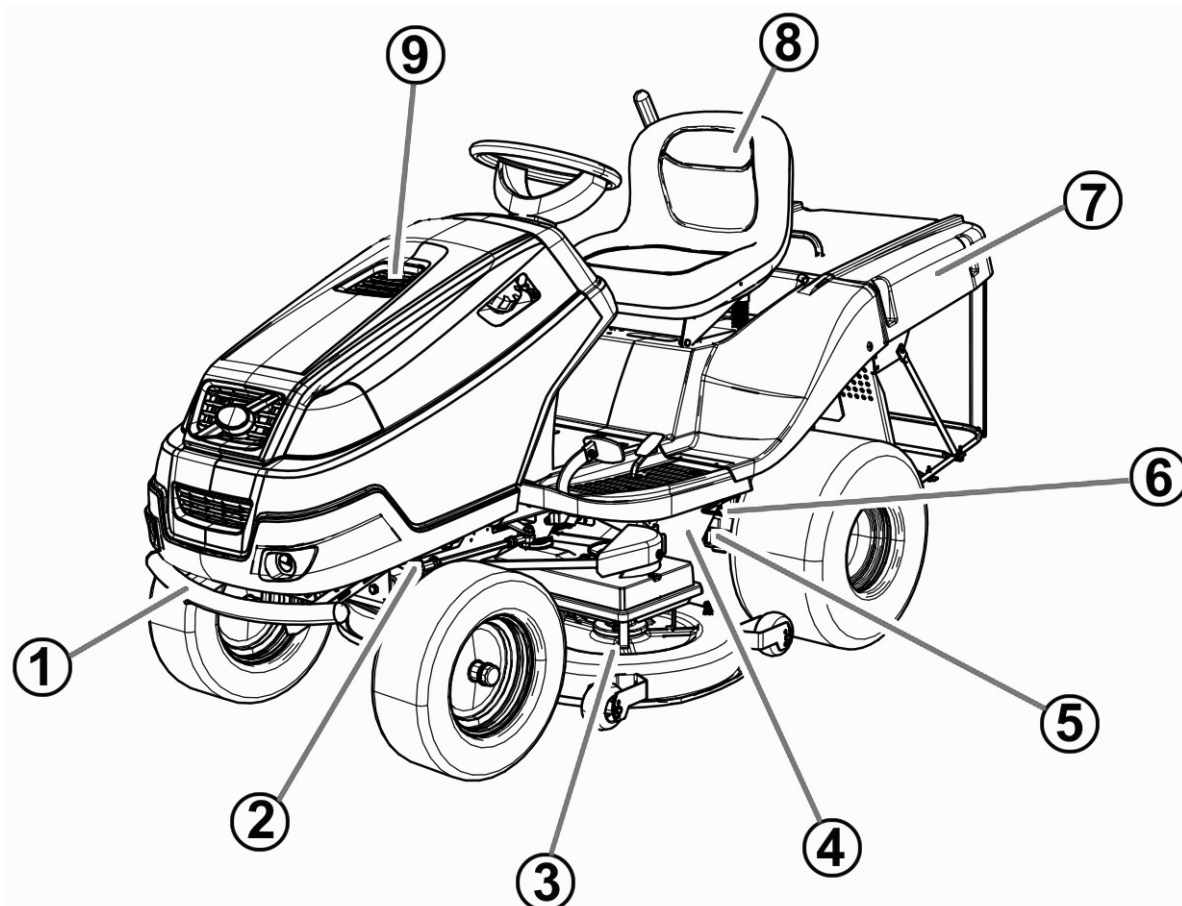
**IT** Manuale di istruzioni

**NL** Gebruikershandleiding

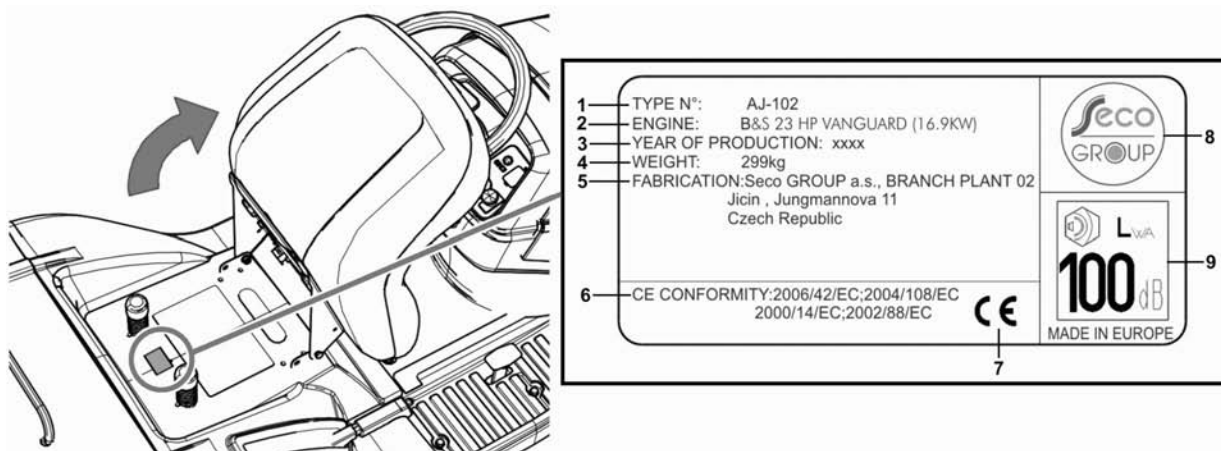
**ES** Manual de usuario

**PL** Instrukcja obsługi

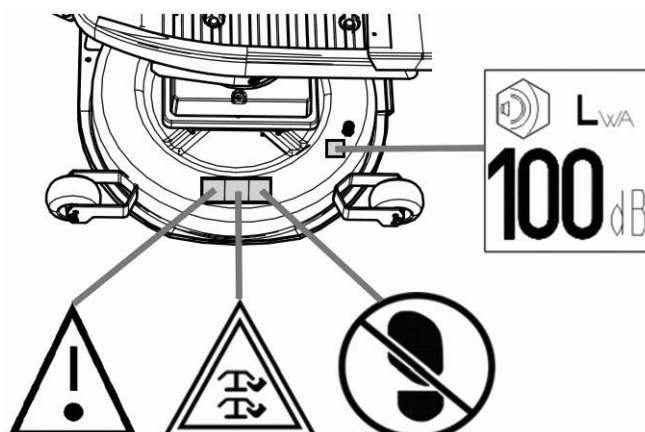
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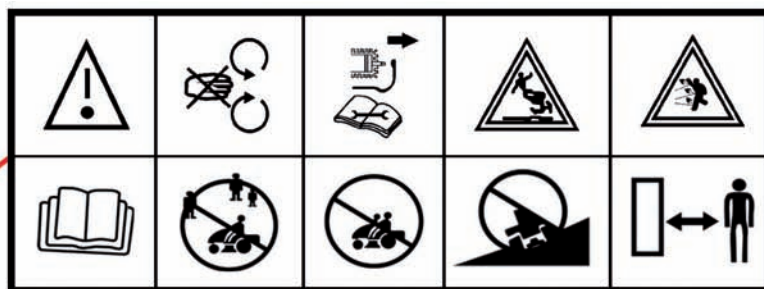


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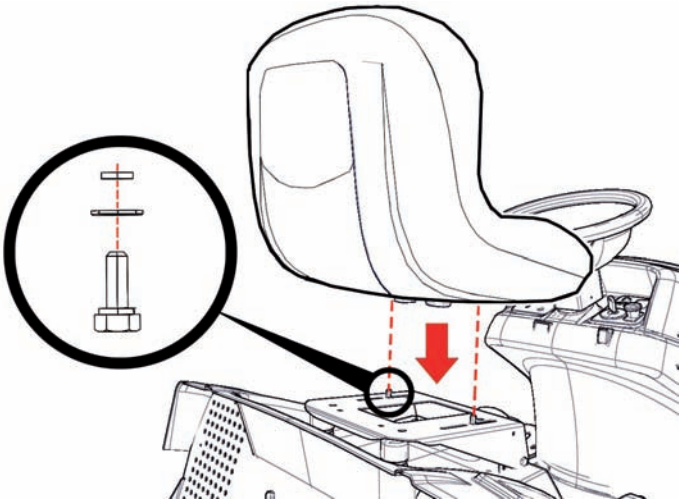
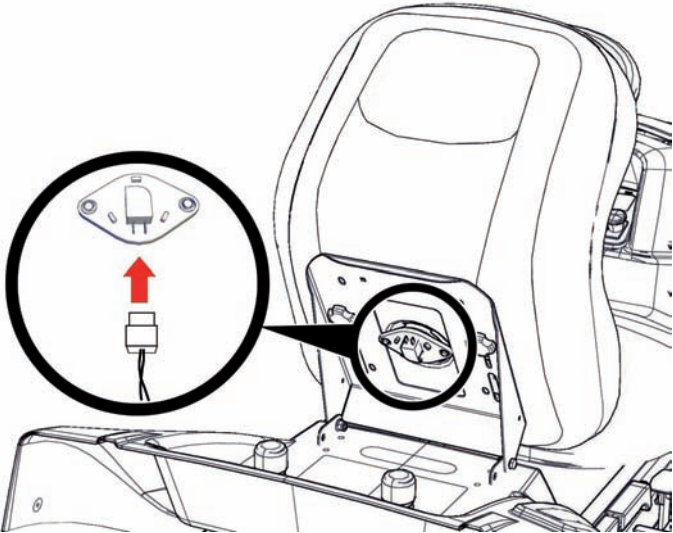
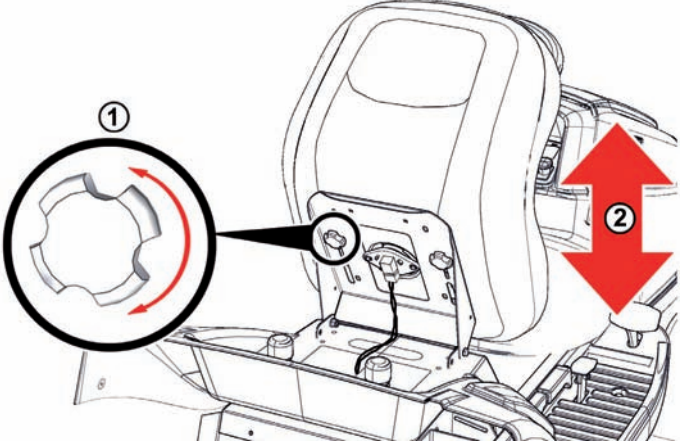
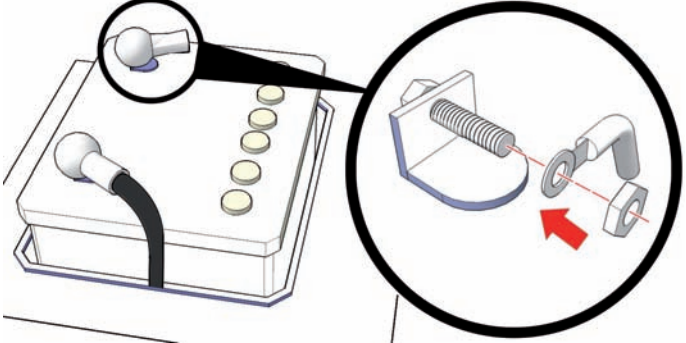
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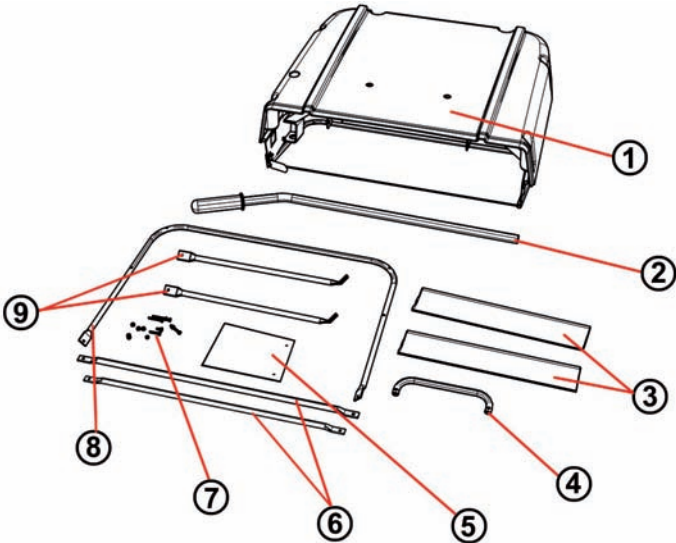
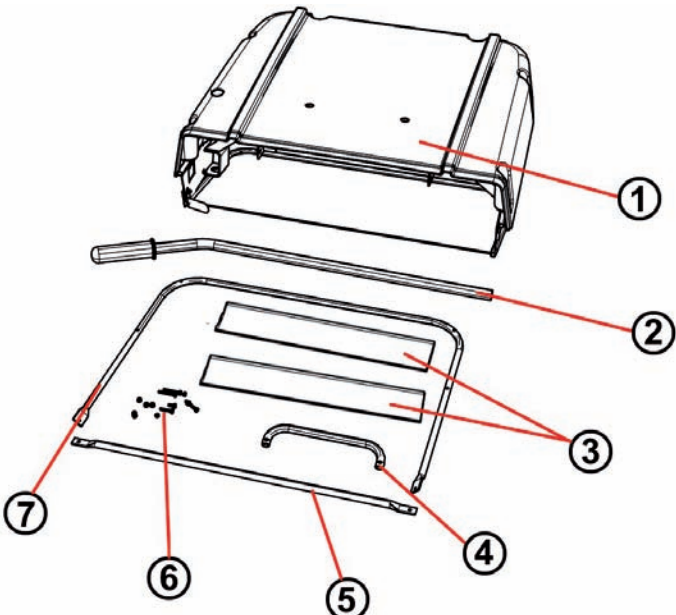
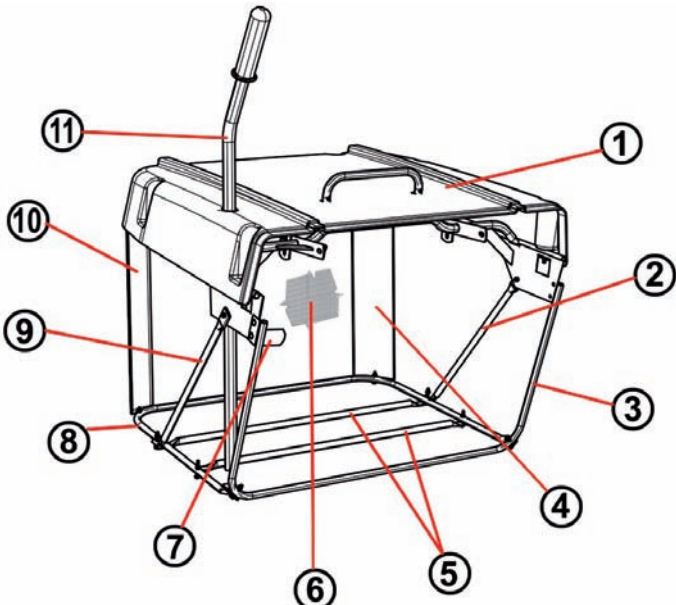


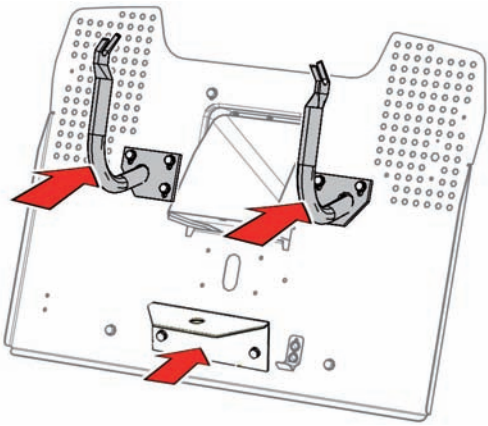
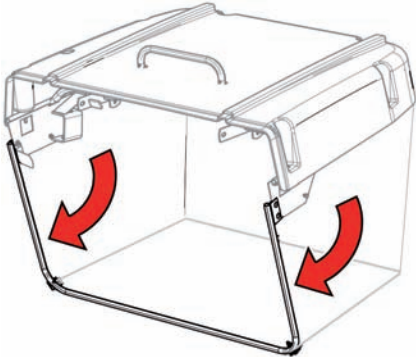
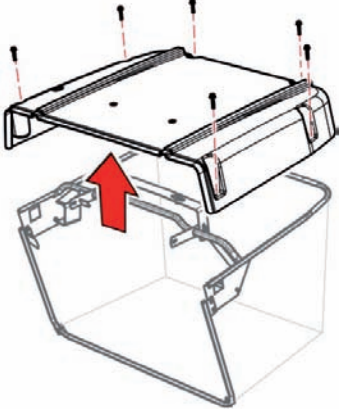
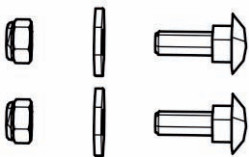
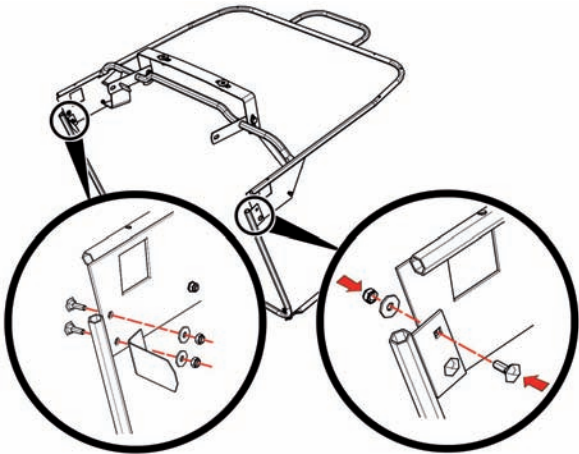


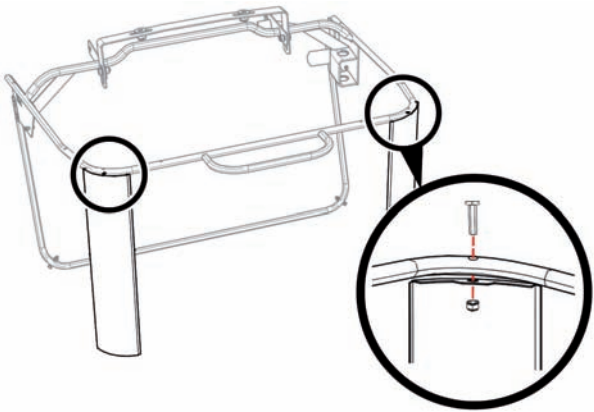
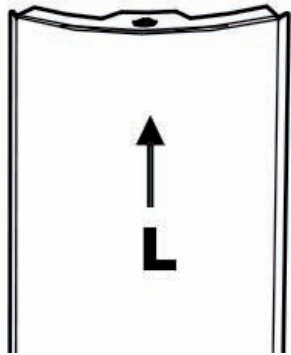
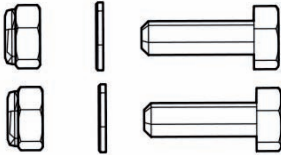
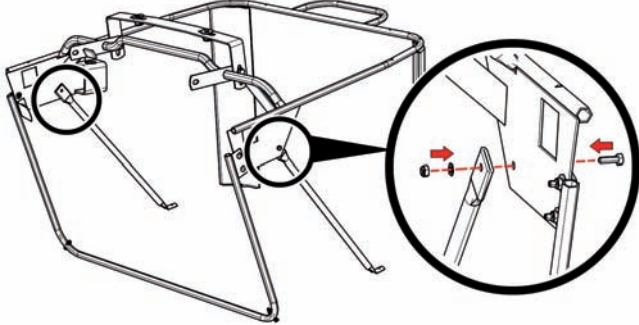
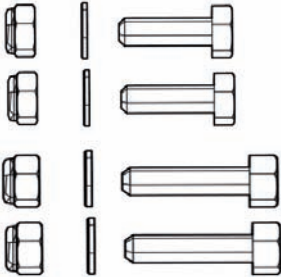
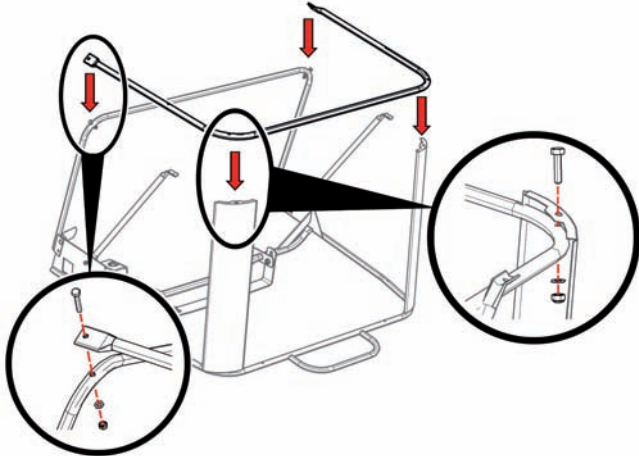
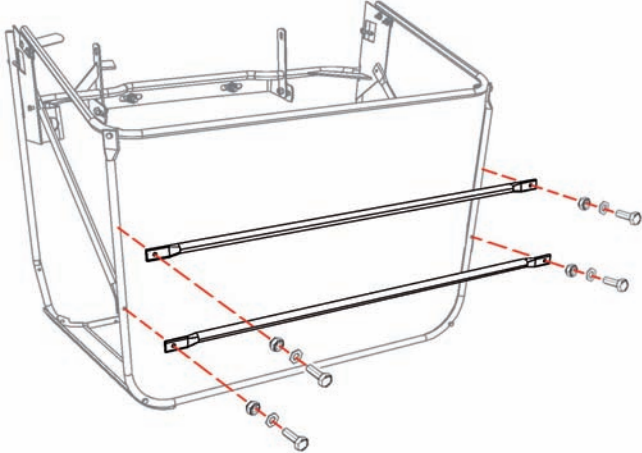
This diagram illustrates the first six steps of assembling the Honda CRF150F. The components are numbered as follows:

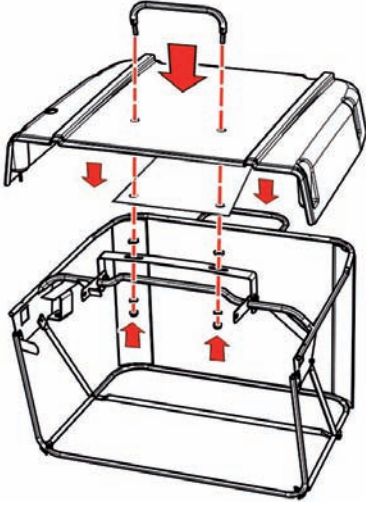
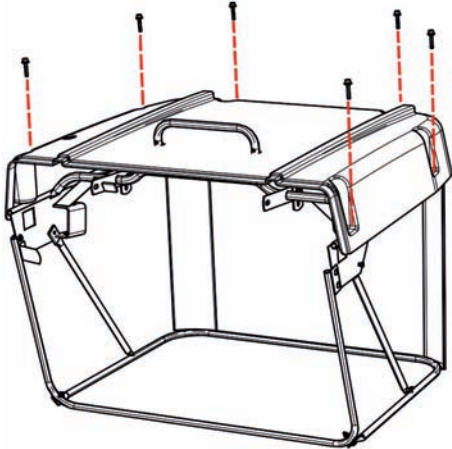
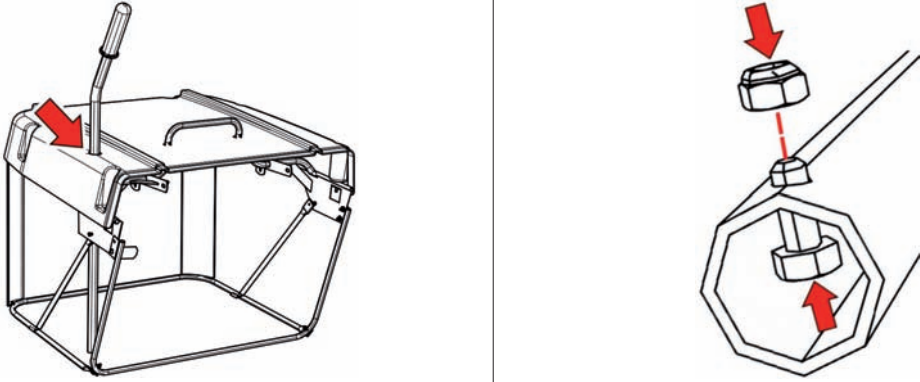
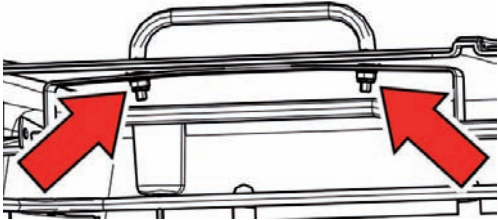
- 1:** The main frame of the motorcycle.
- 2:** The front fender, shown being moved into position with red arrows.
- 3:** The front wheel assembly.
- 4:** The seat.
- 5:** The handlebars and controls.
- 6:** The rear fender.

|                      |                                                                                      |
|----------------------|--------------------------------------------------------------------------------------|
| <p><b>3.3.1b</b></p> |    |
| <p><b>3.3.1c</b></p> |   |
| <p><b>3.3.1d</b></p> |  |
| <p><b>3.3.1e</b></p> |  |

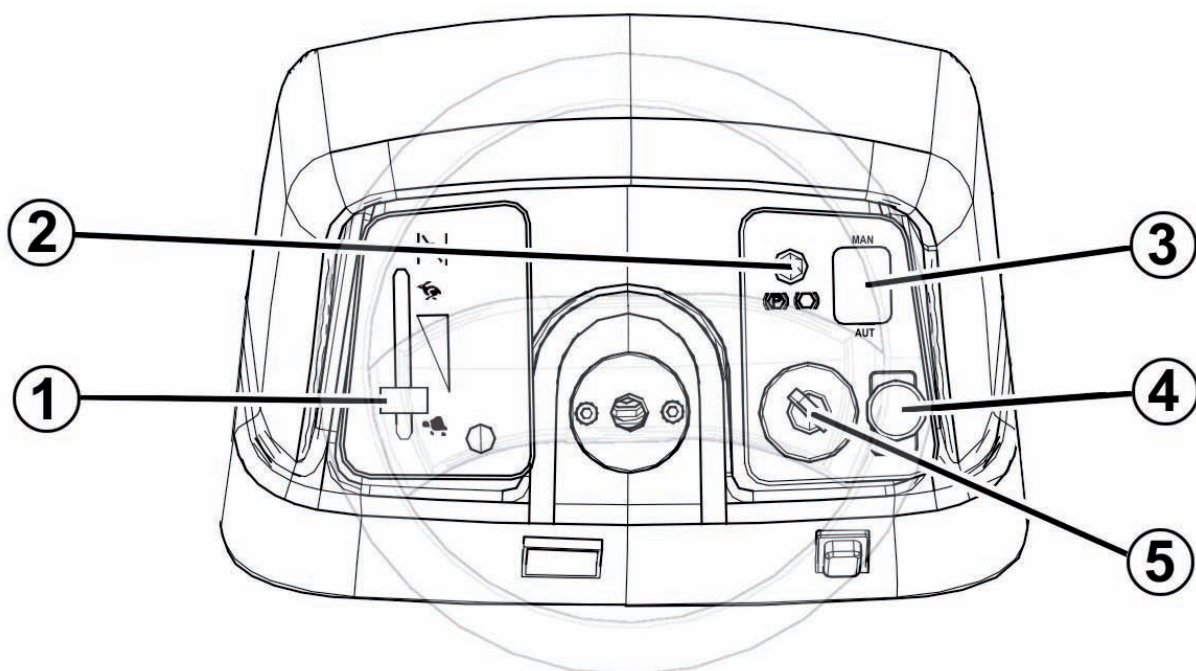
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| <p><b>3.3.2a</b></p> |    |
| <p><b>3.3.2b</b></p> |   |
| <p><b>3.3.2c</b></p> |  |

|        |                                                                                      |                                                                                      |
|--------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 3.3.2d |    |                                                                                      |
| 3.3.2e |    |                                                                                      |
| 3.3.2f |  |                                                                                      |
| 3.3.2g |  |                                                                                      |
| 3.3.2h |   |  |

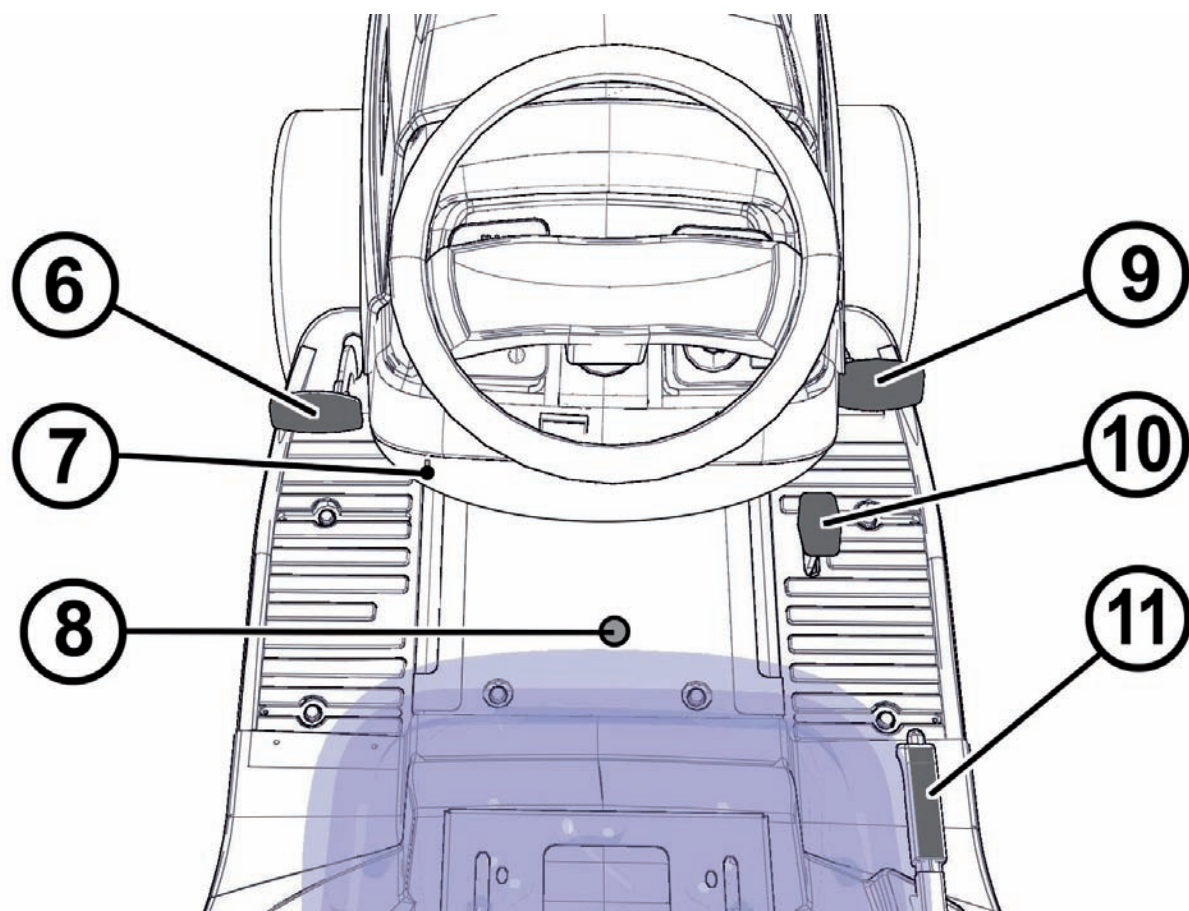
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| <p><b>3.3.2i</b></p> |     |  |
| <p><b>3.3.2j</b></p> |     |   |
| <p><b>3.3.2k</b></p> |   |  |
| <p><b>3.3.2l</b></p> |  |                                                                                     |
| <p><b>3.3.2m</b></p> |  |                                                                                     |

|                      |                                                                                      |
|----------------------|--------------------------------------------------------------------------------------|
| <p><b>3.3.2n</b></p> |    |
| <p><b>3.3.2o</b></p> |   |
| <p><b>3.3.2p</b></p> |  |
| <p><b>3.3.2q</b></p> |  |
| <p><b>3.4.1</b></p>  |  |

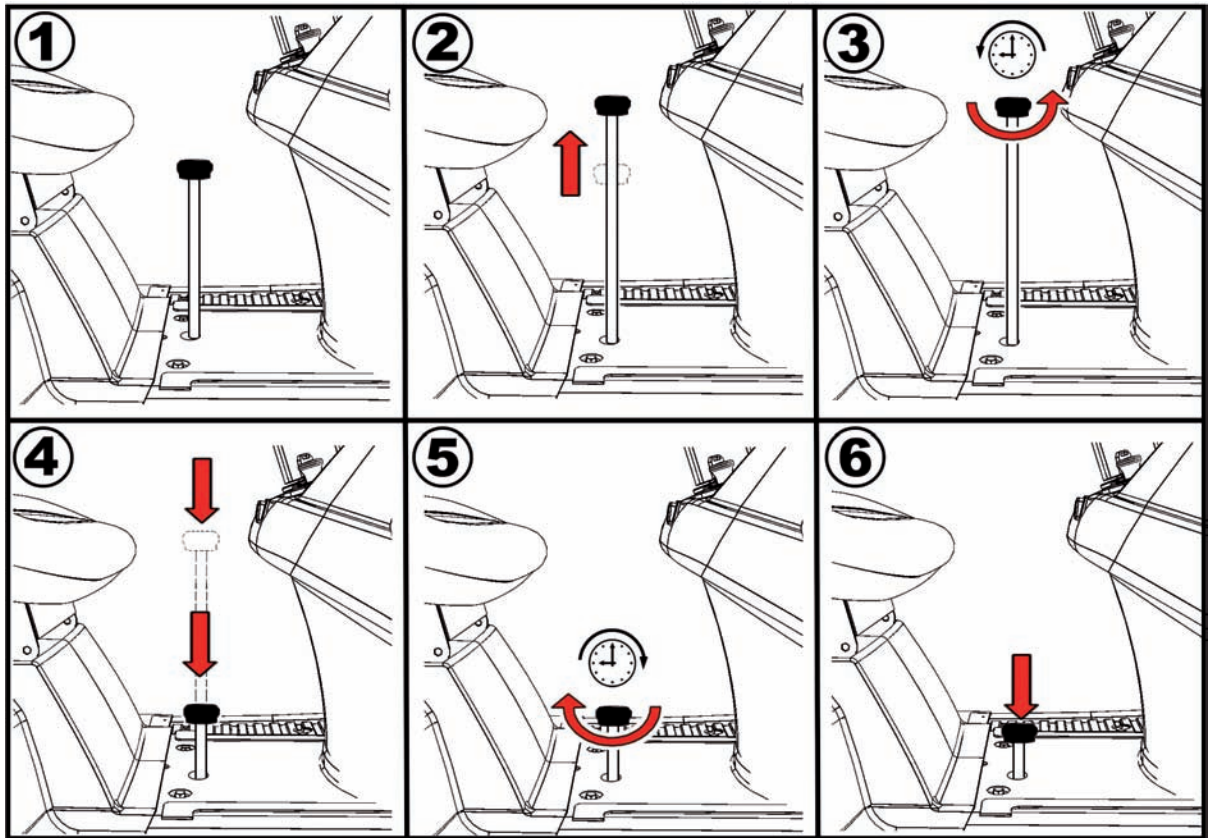
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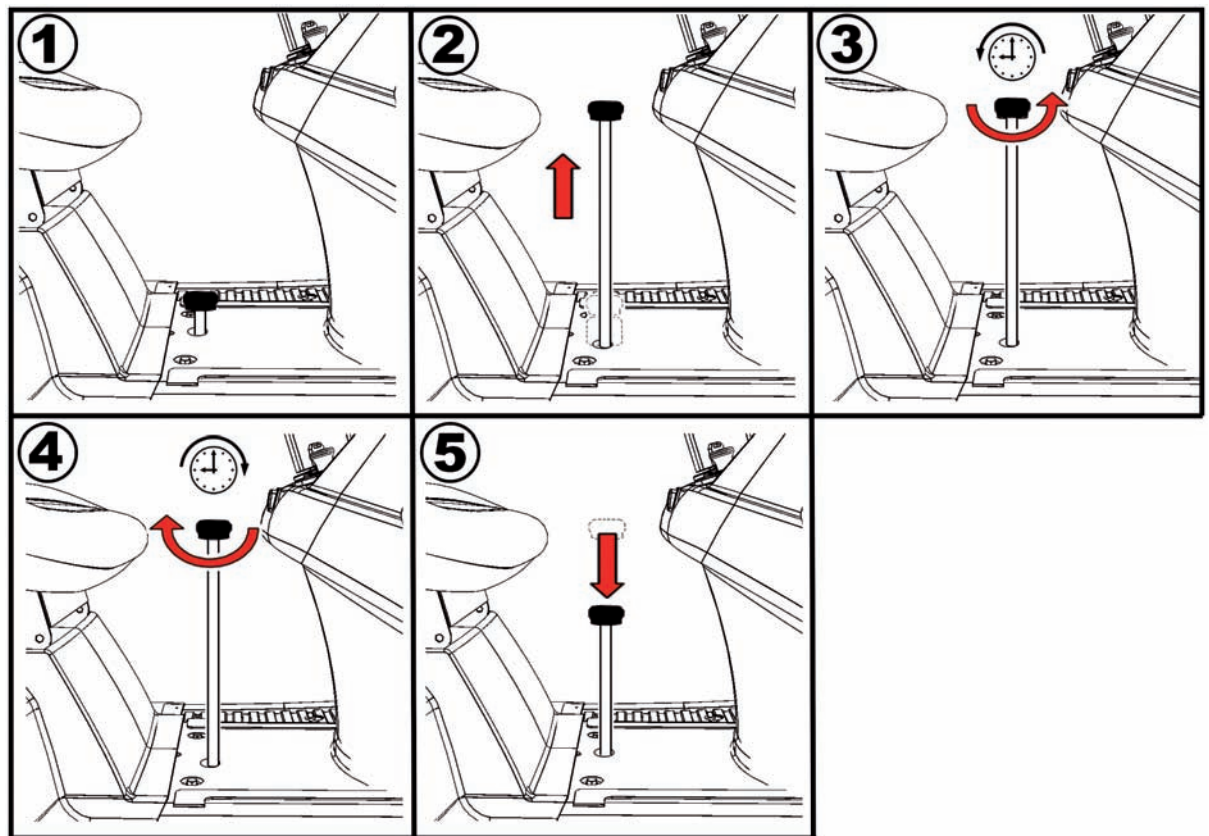
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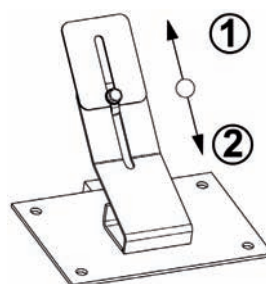
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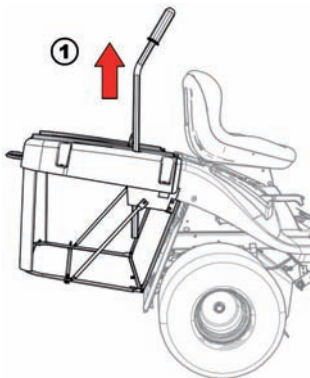
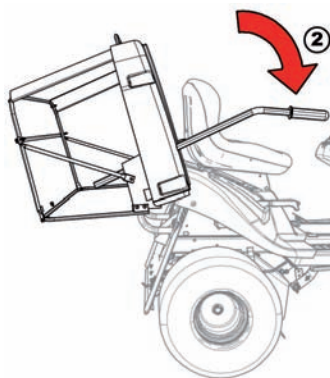
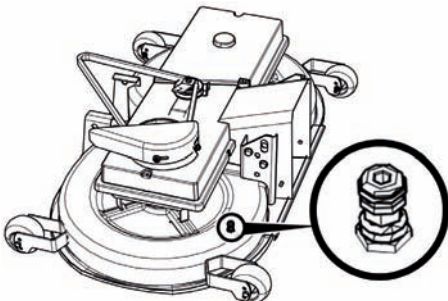
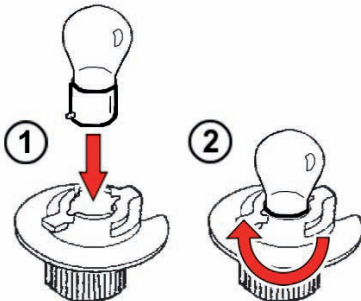
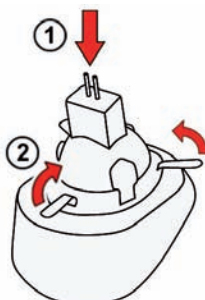
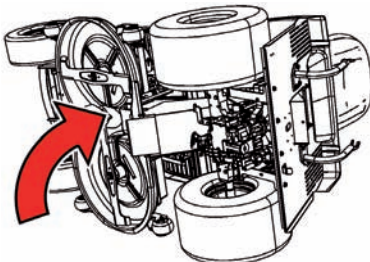
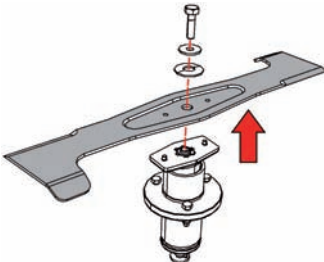
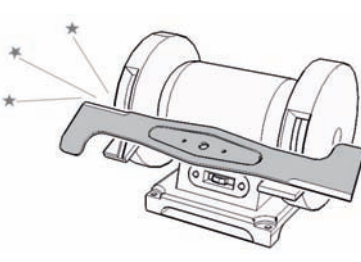
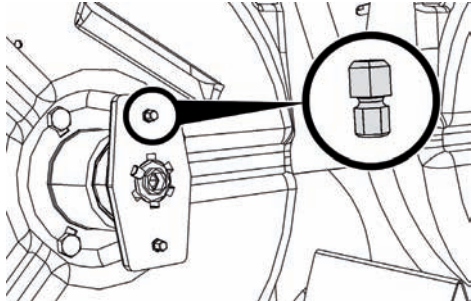


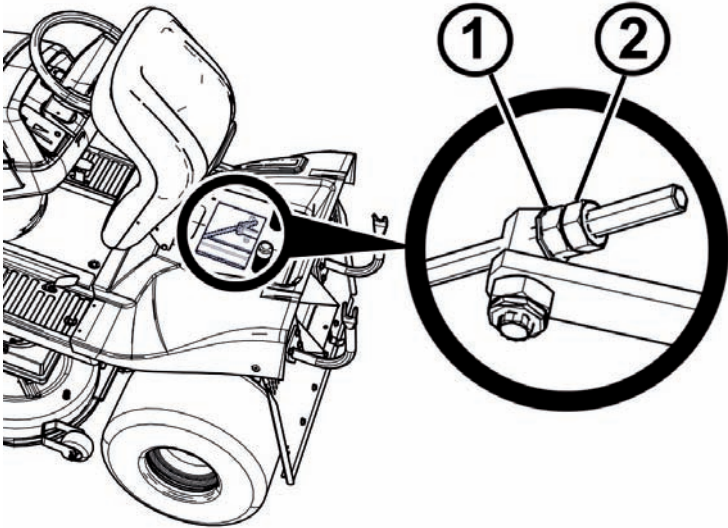
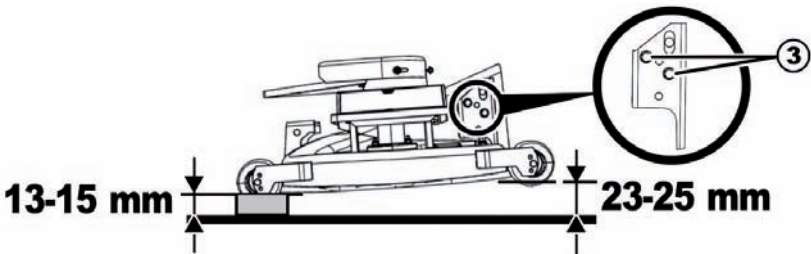
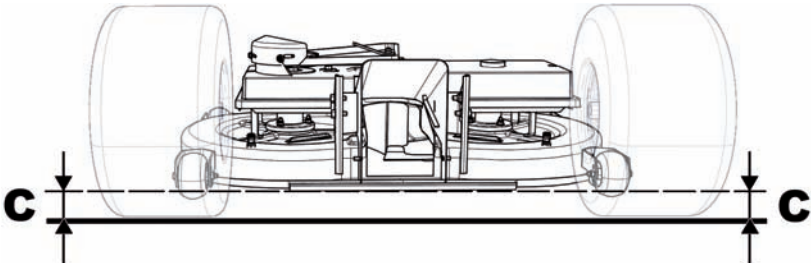
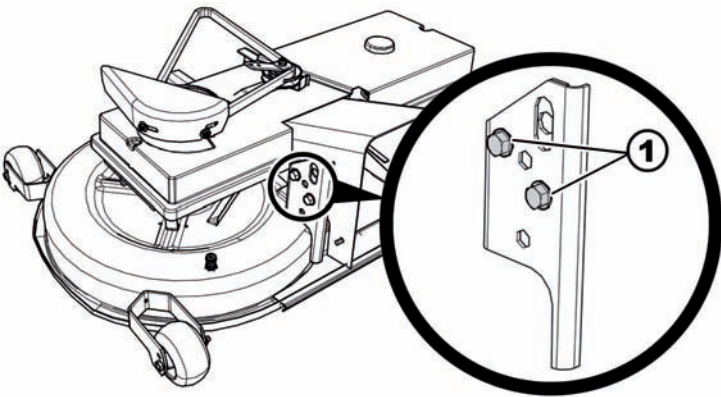
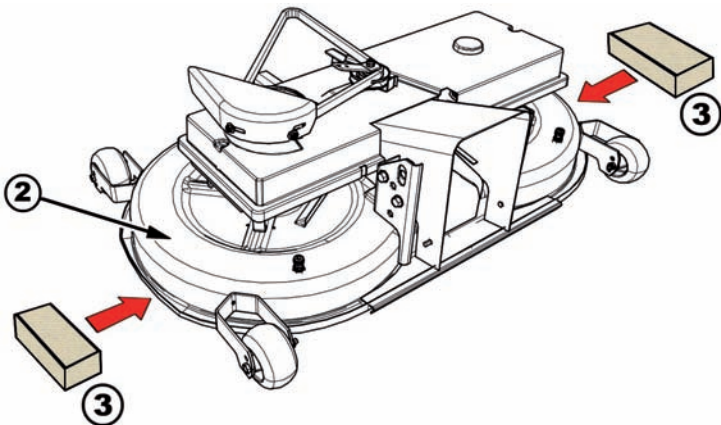
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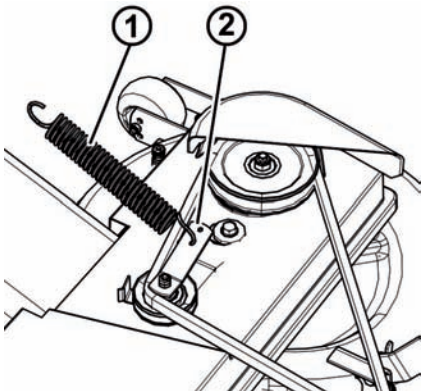
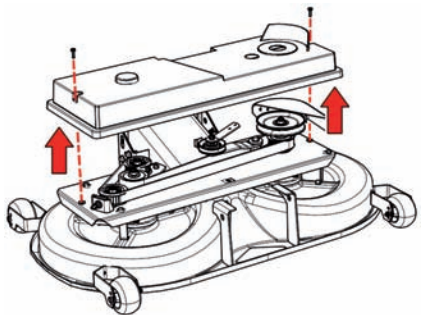
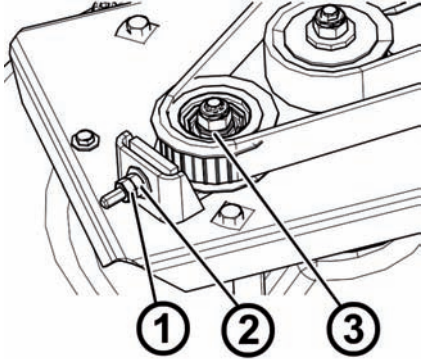
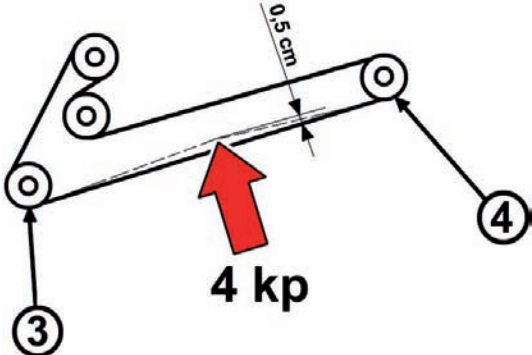
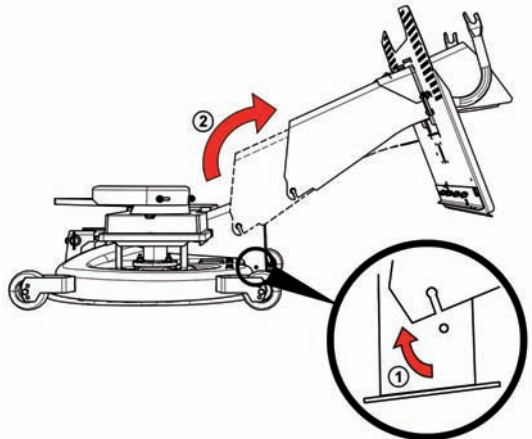


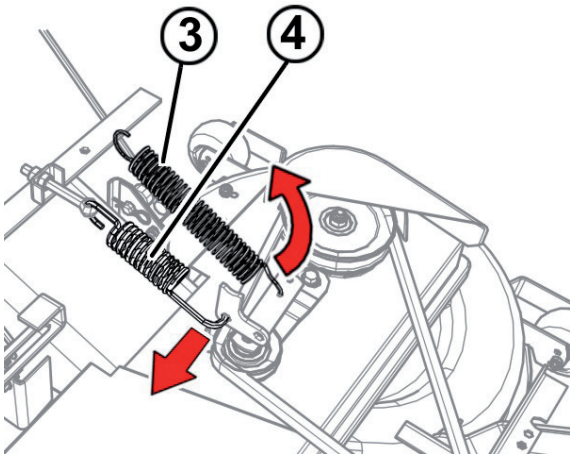
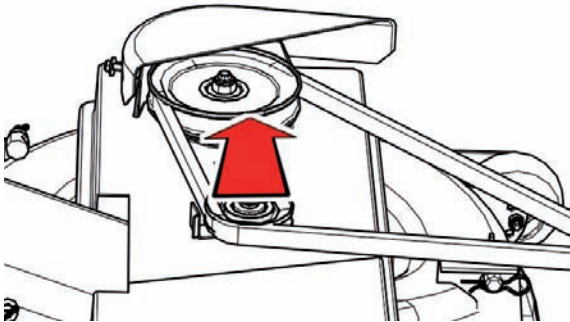
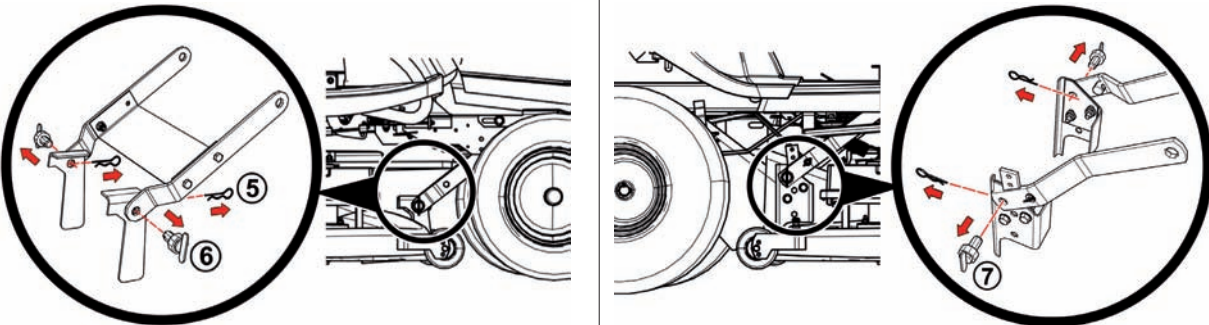
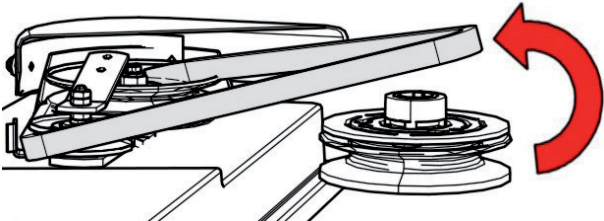
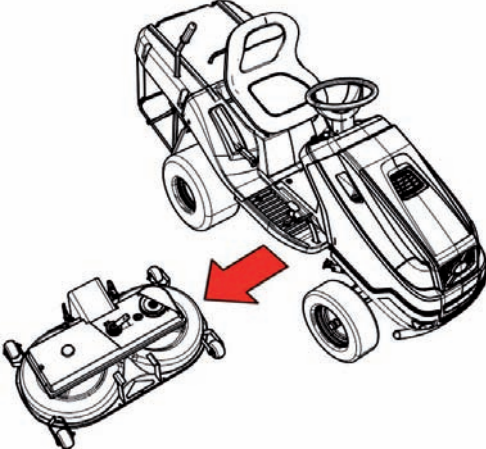
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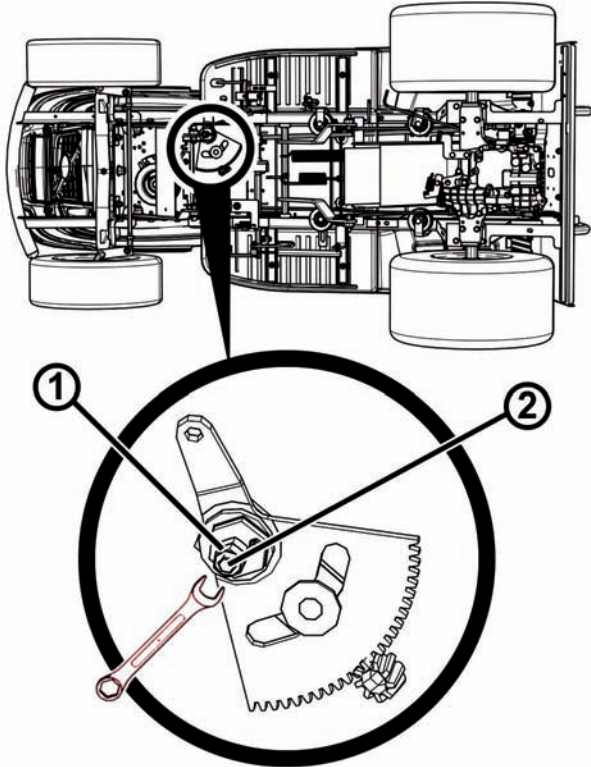
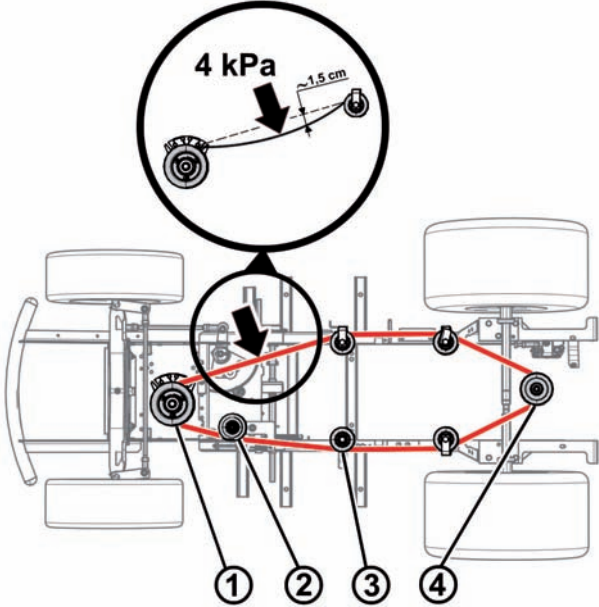
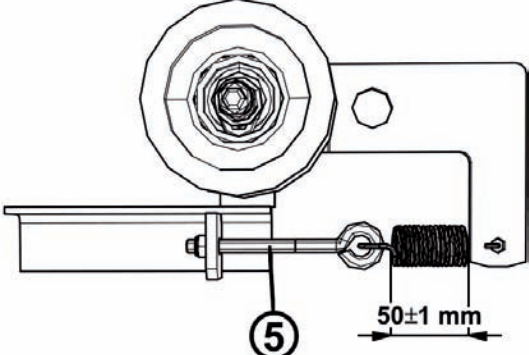


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| 5.6b   |     |   |                                                                                       |
| 6.2.2  |    |                                                                                      |                                                                                       |
| 6.3.3a |   |                                                                                      |                                                                                       |
| 6.3.3b |  |                                                                                      |                                                                                       |
| 6.3.6a |   |  |  |
| 6.3.6b |  |                                                                                      |                                                                                       |

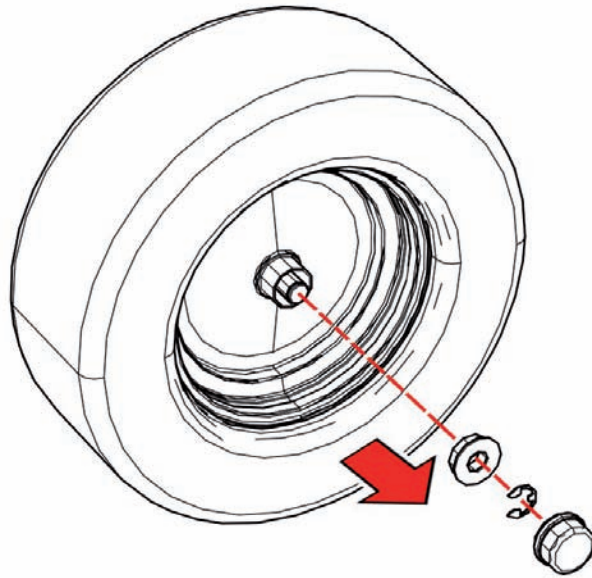
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| 6.3.7a |    |
| 6.3.7b |    |
| 6.3.7c |  |
| 6.3.7d |  |
| 6.3.7e |  |

|         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6.3.8a  |  <p>Diagram 6.3.8a shows a mechanical assembly. A coiled spring is connected to a component labeled 1. Component 2 is a lever or arm that is pivoted and connected to the spring mechanism. The assembly is mounted on a base with other mechanical parts visible in the background.</p>                                                                                                   |
| 6.3.9a  |  <p>Diagram 6.3.9a shows a mechanical assembly with a horizontal plate. Two red arrows point upwards from the base of the plate, indicating the direction of movement or force applied to the assembly.</p>                                                                                                                                                                                |
| 6.3.9b  |  <p>Diagram 6.3.9b shows a mechanical assembly with three components labeled 1, 2, and 3. Component 1 is a small pin or bolt. Component 2 is a larger pin or bolt. Component 3 is a gear or pulley. The assembly is mounted on a base with other mechanical parts visible in the background.</p>                                                                                          |
| 6.3.9c  |  <p>Diagram 6.3.9c shows a mechanical assembly with a red arrow indicating a force of 4 kp. A dimension of 0.5 cm is shown. The assembly consists of a lever arm with a pivot point, a spring, and a component labeled 4. The lever arm is connected to a base with other mechanical parts visible in the background.</p>                                                                |
| 6.3.10a |  <p>Diagram 6.3.10a shows a mechanical assembly with a red arrow indicating a force of 2 kp. A circular inset shows a detail of the assembly, with a red arrow indicating a force of 1 kp. The assembly consists of a lever arm with a pivot point, a spring, and a component labeled 2. The lever arm is connected to a base with other mechanical parts visible in the background.</p> |

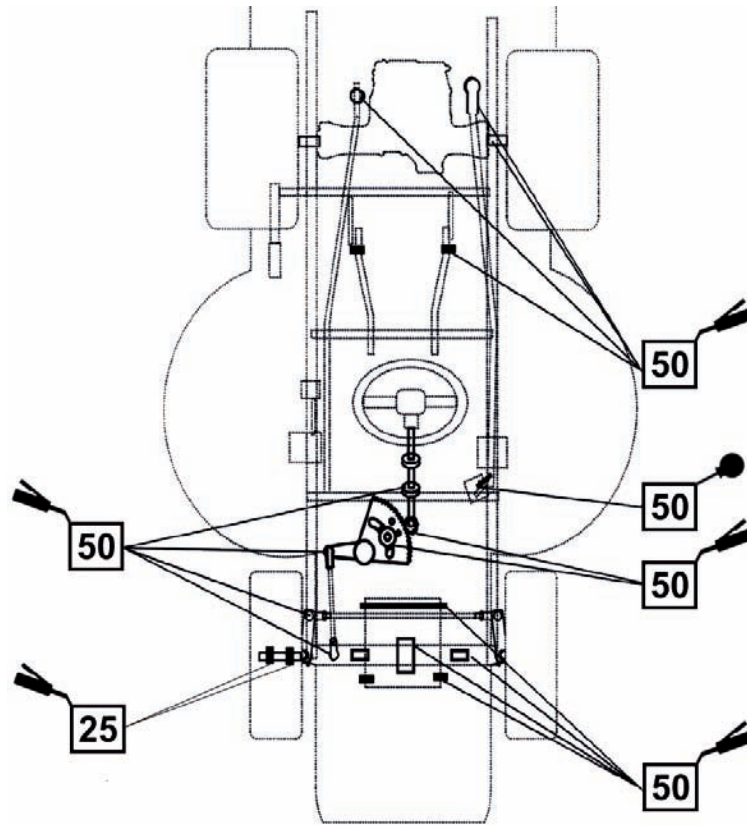
|         |                                                                                      |
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| 6.3.10b |    |
| 6.3.10c |    |
| 6.3.10d |  |
| 6.3.10e |  |
| 6.3.10f |  |

|                       |                                                                                      |
|-----------------------|--------------------------------------------------------------------------------------|
| <p><b>6.3.11</b></p>  |    |
| <p><b>6.3.12a</b></p> |   |
| <p><b>6.3.12b</b></p> |  |

6.3.14



6.4



## FOREWORD

**Dear customer,**

Thank you for buying a lawn mower from the Seco Group a.s. Seco is recognized in markets throughout Europe and around the world as a manufacturer of high-quality lawn care machines and accessories.

This manual contains instructions for safe setup, operation and maintenance of your mower.

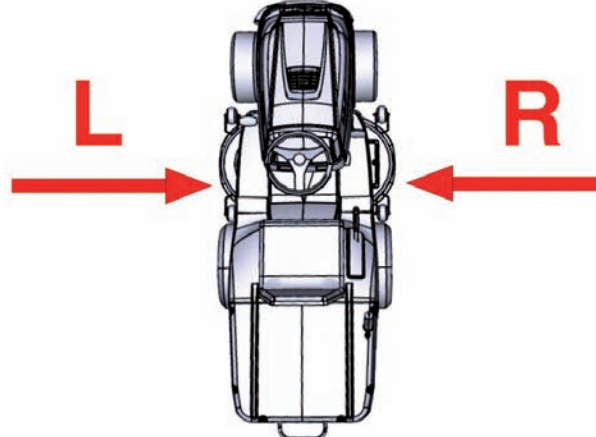
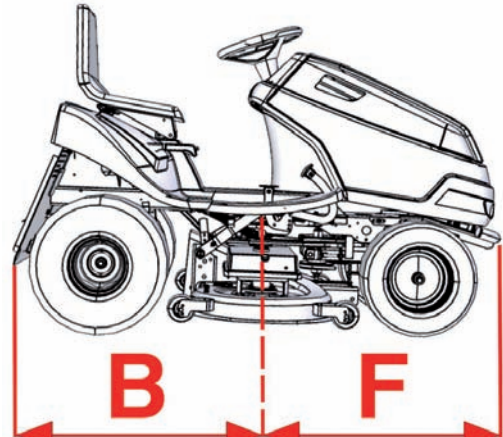
|                                                                                   |                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>Read this manual carefully. Comply with all instructions contained in this manual. They guide you not only in operating your machine, but also help you to ensure its optimal use and long life. <b>Do not use the machine unless you are thoroughly familiar with all instructions, restrictions and recommendations provided in this manual.</b></p> |
|  | <p>Store this manual for later use. The manual must be seen as a part of the mower and must accompany it if the machine is sold.</p>                                                                                                                                                                                                                      |

If you have any questions, or if anything is unclear, feel free to contact one of our more than 100 authorized, well-equipped service centres throughout Europe. They give you access to factory-trained and tested service professionals.

### Symbols used in this manual

| SYMBOL                                                                                                                                                                   | MEANING                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br> | <p>These symbols mean "<b>CAUTION</b>" and "<b>WARNING</b>" and point to factors that could damage the machine and/or severely injure the user.</p>                                |
|                                                                                       | <p>This symbol indicates an important instruction, characteristic, practice or issue that must be followed or kept in mind when setting up, using and maintaining the machine.</p> |
|                                                                                       | <p>This symbol indicates useful information related to the machine or accessories.</p>                                                                                             |
|                                                                                       | <p>This symbol refers to the illustration in the front portion of the manual. It is always accompanied by the illustration number.</p>                                             |
|                                                                                       | <p>This symbol refers to another chapter of this or another manual. It is usually accompanied by the number of the chapter to which it refers.</p>                                 |

### Links to guidelines

| Left and right sides                                                                | Back and front ends                                                                  |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  |  |
| <p>L = left side, R = right side</p>                                                | <p>B = back end, F = front end</p>                                                   |

# 1. TECHNICAL INFORMATION

## 1.1 Use

Model **AJ102** or **AG122** machines bearing the **STARJET** brand are double-axled self-propelled lawn mowers that are intended for **cutting flat, maintained lawns with a maximum growth height of 10 cm**, e.g., in parks, gardens and playgrounds, or on gentle slopes **that do not contain foreign objects** (fallen branches, stones, solid objects, etc.). **The slope must not exceed 10° (17%)**.



**Any use of this self-propelled mower that is not mentioned in this manual or that extends beyond the range of use mentioned is considered use that violates the purpose.** The user bears exclusive responsibility for all such use, and the manufacturer is not responsible for damages arising therefrom. The user is also responsible for adhering to the conditions prescribed by the manufacturer for operation, maintenance and repair of this machine, which **must be used, maintained and repaired only by persons who are familiar with it and who have been instructed in safety.**

Only **manufacturer-approved accessories** can be attached to the machine. **Using non-approved accessories will immediately void the warranty.**

## 1.2 MAIN PARTS OF THE MOWER

**AJ102** and **AG122** lawn mowers consist of the following basic assemblies:



**1.2**

### **(1) Frame and bumper**

The frame and bumper support most of the machine's main parts.

### **(2) Front axle and wheels, including steering mechanism**

The front axle allows the wheels to be steered. Steering is done with a steering wheel.

### **(3) Mowing mechanism**

The mowing mechanism cuts the grass. It is located under the machine. It consists of a cover, a main plate and two mowing blades.

### **(4) Grass removal tube**

Connects the mowing mechanism to the grass catcher. It routes the grass to the catcher.

### **(5) Transmission and rear-wheel drive**

The transmission box and hydrostatic transmission are for shifting gears when driving.

### **(6) Bypass**

The bypass lever is for engaging and disengaging power from the transmission to the rear wheels. It is located near the left rear wheel and, depending on the machine's design, is either in front of or behind the wheel.

### **(7) Grass catcher**

The grass catcher, located at the back of the machine, and consists of a steel tube frame, a fabric bag and a dumping lever.

### **(8) Driver's area**

The comfortable seat allows easy access to all of the machine's controls.

### **(9) Bonnet, engine, wiring and battery**

The bonnet is a combination of plastic and metal covers that appropriately cover the machine's electrical and mechanical parts. Located under the hood is a 4-stroke petrol engine that is secured to the frame. Depending on the machine's design, the battery is located either in a box below the seat or under the front bonnet.

## 1.3 MANUFACTURING PLATE AND OTHER LABELS USED ON THE MACHINE

### 1.3.1 MANUFACTURING PLATE

Each self-propelled mower is marked with the manufacturer's label, **located below the seat**. You can access it by lifting the seat.

|                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br><b>1.3.1</b> | <ol style="list-style-type: none"> <li>1. Mower model</li> <li>2. Engine model</li> <li>3. Model year</li> <li>4. Weight</li> <li>5. Name and address of manufacturer</li> <li>6. EC product conformity regulations</li> <li>7. Product conformity symbol</li> <li>8. Manufacturer's logo</li> <li>9. Guaranteed noise level according to regulation 2000/14/EC</li> </ol> |
|                  | <i>The vendor will write the serial number of your machine on the back cover of this manual.</i>                                                                                                                                                                                                                                                                           |

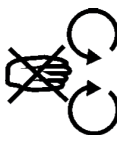
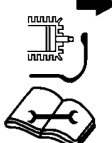
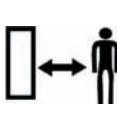
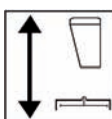
### 1.3.2 OTHER LABELS AND THEIR MEANING

The following labels and stickers are fastened to your machine:

#### ► Labels on the left side of the mower:

|                                                                                                      |                                                                                     |                |                                                                                     |                        |
|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------|------------------------|
| <br><b>1.3.2a</b> |   | Danger         |   | Keep feet clear        |
|                                                                                                      |  | Rotating tools |  | Guaranteed noise level |

#### ► Labels on the canopy below the seat:

|                                                                                                      |                                                                                     |                              |                                                                                     |                                               |                                                                                     |                               |                                                                                       |                                        |
|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------|----------------------------------------|
| <br><b>1.3.2b</b> |  | Danger                       |  | Do not touch during operation.                |  | Repair according to manual.   |  | Do not let the machine run unattended. |
|                                                                                                      |  | Beware of flying objects!    |  | Read the manual                               |  | Do not mow near other people. |  | No riders                              |
|                                                                                                      |  | Do not drive across a slope. |  | Keep unauthorized persons at a safe distance. |  | Switching the mulching flap   |  | Maximum working slope                  |

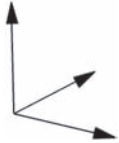
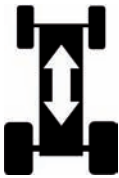
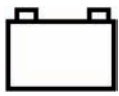


*It is strictly **prohibited to remove or damage labels or symbols** attached to the mower. If a label is damaged or illegible, contact your dealer or the manufacturer for a replacement.*

#### ► Labels near the undercarriage pedal:

|                                                                                                      |                                                                                     |         |
|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| <br><b>1.3.2c</b> | <b>R</b>                                                                            | Reverse |
|                                                                                                      | <b>N</b>                                                                            | Neutral |
|                                                                                                      | <b>F</b>                                                                            | Forward |
|                                                                                                      |  | Fast    |
|                                                                                                      |  | Slow    |

## 1.4 TECHNICAL PARAMETERS

| BASIC SPECIFICATIONS                                                                |                                                                          | UNIT   | MOWER MODEL                                            |                    |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------|--------------------------------------------------------|--------------------|
|                                                                                     |                                                                          |        | AJ102                                                  | AG122              |
|    | Dimensions<br>(length x width x height)                                  | [mm]   | 2400 x 1060 x 1100                                     | 2450 x 1270 x 1200 |
|    | Weight                                                                   | [kg]   | 255                                                    | 290                |
|    | Speed forward / reverse                                                  | [km/h] | 8 / 4                                                  |                    |
|   | Cutting height                                                           | [mm]   | 30 - 90                                                | 30 - 80            |
|  | Cutting stroke                                                           | [mm]   | 102                                                    | 122                |
|  | Grass catcher volume                                                     | [l]    | 300, 360                                               |                    |
|  | Wheel dimensions                                                         | Front  | 16 x 6.50-8                                            |                    |
|                                                                                     |                                                                          | Rear   | 20 x 10-8                                              |                    |
|  | Fuel tank capacity                                                       | [l]    | 7.5                                                    | 12                 |
|  | Guaranteed acoustic output level $L_{WA}$                                | [dB]   | < 100*                                                 | < 105*             |
|                                                                                     | Declared noise emission level at the operator $L_{pAd}$ per EN ISO 11201 | [dB]   | < 90*                                                  | < 105*             |
|  | Battery type                                                             | ---    | 12V 32 Ah (23-hp engines)<br>12V 24 Ah (other engines) |                    |

\* - For exact values, see the charts on the next page.

► **AJ102 Mower**

| Engine | RPM ± 100<br>(min-1) | Declared noise<br>emission level<br>at the operator<br>LpAd (dB)<br>per EN ISO 11201 | Guaranteed<br>acoustic<br>output level<br>L <sub>WA</sub> (dB) | Weighted RMS acceleration (min.s <sup>-2</sup> ) |                   |       |
|--------|----------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------|--------------------------------------------------|-------------------|-------|
|        |                      |                                                                                      |                                                                | Seat                                             | Steering<br>wheel | Floor |
| BS15   | 2700                 | 85.0                                                                                 | 100                                                            | 0.16                                             | 2.48              | 1.72  |
| BS16   | 2800                 | 83.1                                                                                 | 100                                                            | 0.30                                             | 1.52              | 0.73  |
| BS17I  | 2700                 | 86.0                                                                                 | 100                                                            | 0.94*                                            | 3.34**            |       |
| BS18   | 2800                 | 83.3                                                                                 | 100                                                            | 0.50                                             | 1.38              | 1.20  |
| BS18I  | 2800                 | 83.1                                                                                 | 100                                                            | 0.41                                             | 1.75              | 1.19  |
| BS19I  | 2700                 | 86.0                                                                                 | 100                                                            | 1.3+0.5*                                         | 3.7+1.9**         |       |
| BS20I  | 2800                 | 84.5                                                                                 | 100                                                            | 0.17                                             | 2.07              | 1.59  |
| BS22I  | 2800                 | 84.0                                                                                 | 100                                                            | 0.9+0.4*                                         | 6.0+2.4*          |       |
| BS20   | 2800                 | 86.0                                                                                 | 100                                                            | 0.19                                             | 2.75              | 1.34  |
| BS23   | 2800                 | 84.0                                                                                 | 100                                                            | 1.6+0.6*                                         | <2.5**            |       |
| HO16   | 2800                 | 85.0                                                                                 | 100                                                            | 0.93*                                            | <2.5**            |       |

\* Aggregate value of acceleration (m.s<sup>-2</sup>) per EN 836+A1/A2, appendix G

- \* of total a<sub>vd</sub> vibration per EN 1032+A1

- \*\* vibration transferred to arm a<sub>hvd</sub> per EN 1033+A1

► **AJ122 Mower**

| Engine | RPM ± 100<br>(min-1) | Declared noise<br>emission level<br>at the operator<br>LpAd (dB)<br>per EN ISO<br>11201 | Guaranteed<br>acoustic output<br>level L <sub>WA</sub> (dB) | Weighted RMS acceleration (min.s <sup>-2</sup> ) |                   |       |
|--------|----------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------|-------------------|-------|
|        |                      |                                                                                         |                                                             | Seat                                             | Steering<br>wheel | Floor |
| BS18   | 3000                 | 84.6                                                                                    | 105                                                         | 0.14                                             | 2.16              | 1.35  |
| BS20I  | 3000                 | 89.8                                                                                    | 105                                                         | 0.31                                             | 2.53              | 1.67  |
| BS20   | 3000                 | 86.6                                                                                    | 105                                                         | 0.19                                             | 2.75              | 1.34  |
| BS22I  | 3000                 | 87                                                                                      | 105                                                         | 0.9*                                             | 2.66**            |       |

Specific data on your mower can be found in the following charts according to the model number shown on the inside cover of this publication.

**Explanatory notes:**

| <b>Engines:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Transmissions:</b>                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| BS15 Briggs & Stratton 15.5-hp I/C AVS<br>BS16 Briggs & Stratton 16-hp VANGUARD V-TWIN<br>BS17I Briggs & Stratton 17.5-hp INTEK<br>BS18 Briggs & Stratton 18-hp VANGUARD V-TWIN<br>BS20 Briggs & Stratton 20-hp VANGUARD V-TWIN<br>BS23 Briggs & Stratton 23-hp VANGUARD V-TWIN<br>BS18I Briggs & Stratton 18-hp INTEK<br>BS19I Briggs & Stratton 19.5-hp INTEK<br>BS20I Briggs & Stratton 20(21)-hp INTEK<br>BS22I Briggs & Stratton 22-hp INTEK<br>HO16 Honda 16-hp GCV530 | TT46 TUFF-TORQ K46<br>TT62 TUFF-TORQ K62 |

## 2. OCCUPATIONAL SAFETY

**STARJET** brand **AJ102** and **AG122** self-propelled mowers are manufactured according to applicable European safety norms. The manufacturer confirms this in the **Declaration of Compliance** included at the end of this manual (📖 10).

If this machine is used properly and according to the manual, it is **very safe**.



***If the user does not adhere to work safety and does not heed the warnings in this manual, this self-propelled lawn mower can sever a hand or a foot, or even hurl objects, leading to serious personal injury or death, damage or destruction of the machine, or of some of its parts or accessories.***

### 2.1 SAFETY INSTRUCTIONS

The user bears primary responsibility for his or her own safety and that of other people during operation of the mower. The machine's manufacturer bears no responsibility for personal injury, damage to the machine or ecological damage caused by use and operation not in keeping with all safety instructions given in this manual.

#### 2.1.1 General safety instructions

- ! This machine may be operated only by persons 18 years or older who are familiar with this user manual.
- ! The user of the machine is responsible for the safety of persons present in the machine's operating area.
- ! It is prohibited to perform any technical modifications without prior written consent of the manufacturer. Unauthorized modifications may lead to hazardous working conditions and void the warranty.
- ! Adhere to all fire safety regulations (📖 2.4).
- ! Do not remove the safety stickers and labels from the machine.
- ! Do not go near or underneath the machine if it has been raised and is not sufficiently secured against falling or overturning.
- ! Subjecting components of the grass catcher to stress can damage them, reduce their function or cause objects to fall out of the catcher. Therefore, check them regularly according to the recommendations in this manual.
- ! Always switch off the mowing mechanism and the engine and remove the key from the ignition when:
  - ▶ cleaning the machine
  - ▶ unclogging the mowing mechanism
  - ▶ checking the machine for damage or repairing it after driving over a foreign object
  - ▶ checking for the cause of excessive vibration
  - ▶ repairing the engine or other movable parts (also disconnect the ignition cable)

#### 2.1.2 Before using the machine

- ! Do not use the machine if it is damaged or missing safety equipment. All protective covers and safety elements must be in place at all times. Do not remove or disable any safety devices. Regularly inspect those devices for correct operation.
- ! Do not use the machine when under the influence of alcohol, medication or narcotics.
- ! Do not work with the machine if you suffer dizziness or fainting, or if you are otherwise weakened or unable to concentrate.
- ! Before operating the machine, thoroughly familiarize yourself with all the controls and master their operation so that, if necessary, you can immediately stop the machine or shut off its engine.
- ! Do not change the settings of the engine regulator or engine speed limiter.
- ! Before working with the machine, clear the mowing surface of all stones, wood, wires, bones, fallen branches and other foreign objects that the machine may throw during operation.
- ! Repair all defects before further use. Before starting work, thoroughly inspect the V-belt tension, the sharpness of the mowing blades and the cleanliness of the mowing mechanism cover.

### 2.1.3 While using the machine

- ! The machine must not be used on slopes of more than **10° (17%)**.
- ! Transporting other people, animals or objects on the machine is prohibited. Objects may be transported only on a trailer approved by the machine's manufacturer.
- ! Even when leaving the machine for a short time, always remove the ignition key.
- ! If you are driving the machine outside the mowing area, always shut off the mowing mechanism and raise it to transport position.
- ! If mowing is disengaged, the mowing mechanism must always be in transport position.
- ! Never mow near dumps, holes or river banks. If a wheel gets too close to the edge of a hole or ditch, the mower may suddenly overturn.
- ! While working, keep clear of molehills, concrete supports, tree stumps and the curb stones of gardens and streets. These may come into contact with the blades and damage the mowing mechanism and the machine itself.
- ! If you run into a solid object, stop the machine, shut off the mowing mechanism and the engine, and check the whole machine, especially the steering mechanism. If necessary, repair any damage before restarting the machine.
- ! Where possible, avoid working with the machine on wet grass. Reduced traction may cause skidding.
- ! Avoid obstacles (e.g., sudden changes in slope, ditches, etc.) that could overturn the machine.
- ! Do not try to maintain the machine's stability by stepping on the ground.
- ! Use the machine only in daylight or under sufficient artificial light.
- ! Do not drive the machine on public thoroughfares.
- ! When operating the machine, do not wear loose clothing or short trousers; wear strong, closed work shoes. Never operate the machine barefoot or in sandals.
- ! Do not leave the engine running in enclosed spaces. Exhaust gases contain poisonous substances that have no odour but are nonetheless fatal.
- ! Do not place your hands or feet under the mowing mechanism cover. Never bring any part of your body near the machine's rotating or moving parts.
- ! Do not start the engine without the exhaust pipe.
- ! The noise that occurs during mowing does not ordinarily exceed the highest acoustic pressure and volume values shown in this manual (📖 **1.4**). However, under some conditions, due to terrain characteristics, the noise level may briefly exceed specified levels.
- ! The manufacturer recommends wearing ear protectors while operating the machine. Stress placed on the auditory organs by high volume levels or the long-term effects of noise can permanently damage hearing.
- ! Always give your full attention to driving and the other activities involved in using the machine. The most common ways to lose control over the machine are:
  - ▶ Loss of traction.
  - ▶ Driving too fast; not adapting speed to the surface conditions and characteristics.
  - ▶ Abrupt braking that can lock the wheels.
  - ▶ Using the mower for purposes other than those intended.

### 2.1.4 After working with the machine

- ! Always keep the machine and its accessories clean and in good working order.
- ! The rotating blades are sharp and may cause injury. When handling the blades, wrap them or wear protective gloves.
- ! Regularly check the nuts and bolts that hold the blades, and make sure they are tightened to the right level of torque (📖 **6.3.6**).
- ! Pay special attention to the self-locking nuts. After a nut has been removed twice, its self-locking ability is reduced, and it must be replaced with a new one.

! Regularly check the components and, when necessary, replace them according to the manufacturer's recommendation.

## 2.2 SAFETY INSTRUCTIONS FOR WORKING ON SLOPES

Slopes are a main cause of accidents, loss of control and overturning. These can lead to severe injury or death. Always use extra caution when mowing on slopes. If you are not sure or are unable to mow on a slope, don't do it.

- ! The self-propelled mower can be used on slopes of no more than **10° (17%)** and only vertically, i.e., upward or downward. Horizontal driving on a slope is prohibited.
- ! Extra caution is necessary when turning. Do not turn around on a slope unless absolutely necessary.
- ! Beware of holes, roots or uneven terrain. Uneven terrain may cause your machine to overturn. Tall grass may conceal dangerous obstacles. Therefore, remove all obstacles from the mowing surface ahead of time.
- ! Select a speed that will not require you to stop on a slope.
- ! Be very careful when attaching the grass catcher or other attachments. They may reduce the machine's stability.
- ! Always move slowly and smoothly on a slope. Do not change speed or direction suddenly.
- ! Avoid starting or stopping on a slope. If the wheels lose traction, turn off power to the blades and slowly drive down the slope.
- ! Accelerate very slowly and carefully on slopes, to prevent the machine from lurching. Before a slope, always reduce the engine speed. Especially when driving downward, reduce the speed to the minimum for using the transmission's braking effect.

## 2.3 CHILD SAFETY

If the operator is not alert to the presence of children, a tragic accident may occur. The mower's movement attracts their attention. Never assume that children will stay where you saw them last.

- ! Never leave children unsupervised in mowing areas.
- ! Be alert and ready to stop your machine in case of an emergency.
- ! Before and while backing up, look to the rear and at the ground.
- ! Never transport children on the mower. They can fall and be severely injured or dangerously interfere with your operation of the mower. Never allow children to operate the machine.
- ! Take extra care in areas of limited visibility (near trees, bushes, walls, etc.).

## 2.4 FIRE SAFETY

While using the mower, you must observe all work and fire safety rules relevant to this type of machine.

- ! Regularly remove flammable materials (dry grass, leaves, etc.) from the area of the engine exhaust, battery and anywhere where they might come into contact with petrol or oil, ignite and set the machine on fire.
- ! Allow the mower's engine to cool before storing it in an enclosed space.
- ! Use extra caution when working with petrol, oil and other flammable substances. These are highly flammable substances, and their fumes are explosive. Do not smoke while working. Never unscrew the fuel cap, and never add fuel when the engine is running or is warm, or if the machine is in an enclosed space.
- ! Check the fuel flow before use; do not fill the tank up to the neck. Engine heat, sun and the expandability of fuel may lead to overflow and result in fire. Use only approved containers for storing flammable substances. Never store the machine or fuel container near any heat source. Use extra caution when handling the battery. Battery gases are highly explosive. Do not smoke or use an open flame when handling the battery, as this may cause serious injury.

## 3. PREPARING FOR OPERATION

### 3.1 UNPACKING AND CONTENT INSPECTION

The self-propelled mower is delivered in a fabric cover (1). Some parts of the machine have been dismantled for transport at the factory, and they must be installed before operation. The machine is unpacked and prepared for operation by the dealer as part of pre-sale service.

|                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"> <li>- After delivery, immediately check to see if the packaged machine is damaged. If there is damage, notify the carrier. If a claim is not made on time, it cannot be honoured.</li> <li>- Check to see that the machine is the model you ordered. If it is the wrong model machine, do not unpack it, and immediately alert the supplier.</li> </ul> |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

After removing the cover, carefully remove the machine from the pallet. This requires preparation of **ramps (2)** to avoid damage to parts of the machine. Make sure that there is no shipping damage. Also unpack all dismantled parts and inspect them.

|                                                                                                     |                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p><b>3.1</b></p> | <ol style="list-style-type: none"> <li>1. Fabric cover</li> <li>2. Ramps</li> <li>3. Steering wheel</li> <li>4. Seat</li> <li>5. Documentation</li> <li>6. Grass catcher</li> </ol> |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**The basic package includes:**

- ▶ Mower
- ▶ Steering wheel (3)
- ▶ Seat (4)
- ▶ Grass catcher (6) (comes partially disassembled in a cardboard box, with a hanger, connectors and two triangular yellow stickers) (📖 3.3.2)
- ▶ Documentation (5) (packing list, user manual for mower, engine manual, battery manual and service book)

### 3.2 DISPOSAL OF PACKAGING

|                                                                                     |                                                                                                                                                                                 |                                                                                       |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  | <p>After unpacking the accessories, make sure you properly dispose of and recycle the packaging material. Comply with applicable waste disposal laws in the user's country.</p> |  |
|  | <p>Disposal can be entrusted to a specialized company.</p>                                                                                                                      |                                                                                       |

### 3.3 ASSEMBLING PACKED UNITS

|                                                                                     |                                                                                                                                                          |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>Because it is technical work, your dealer will prepare the mower for operation (according to the following instructions).</p>                         |
|  | <p>Before starting installation, remove all protective materials, place the mower on a flat surface, and align the front wheels in forward position.</p> |

### 3.3.1 STEERING WHEEL, SEAT AND BATTERY

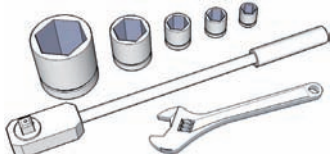
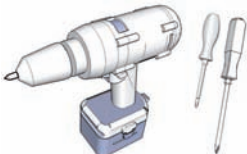
|                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>a) Install the steering wheel:</b>                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                  | <br><b>3.3.1a</b> |
| <ul style="list-style-type: none"><li>▶ Place the wheel on the column <b>(1)</b> and turn it so that the holes in the steering wheel and column meet.</li><li>▶ Insert the included peg into the hole <b>(2)</b> and pound it with a hammer.</li></ul>                                                            |                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                      |
| <b>b) Fasten the seat:</b>                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                  | <br><b>3.3.1b</b> |
| <ul style="list-style-type: none"><li>▶ Place the seat in its position on the machine and fasten it using the screws preinstalled in the seat.</li></ul>                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                      |
| <b>c) Connect the cable to the safety switch:</b>                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                  | <br><b>3.3.1c</b> |
| <ul style="list-style-type: none"><li>▶ Connect the electrical cable to the switch connector at the bottom of the seat.</li></ul>                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                      |
| <b>d) Adjust the seat to an appropriate position:</b>                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                  | <br><b>3.3.1d</b> |
| <ul style="list-style-type: none"><li>▶ Loosen the bolts with the plastic washers <b>(1)</b>.</li><li>▶ Slide the seat forward or backward to the desired position <b>(2)</b>.</li><li>▶ Tighten the bolts with the plastic washers.</li></ul>                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                      |
| <b>e) Connect the battery:</b>                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                  | <br><b>3.3.1e</b> |
|                                                                                                                                                                                                                                  | <i>Depending on the machine's design, the battery is located either in a <b>box below the seat</b> or <b>under the front bonnet</b>.</i>                                                                                                                                                                                                                                                         |                                                                                                      |
| <ul style="list-style-type: none"><li>▶ Loosen the bolts on the battery's pole terminals.</li><li>▶ Attach the <b>red cable</b> to the battery's positive (+) pole and secure it with the bolt.</li><li>▶ Attach the <b>brown cable</b> to the battery's negative (–) pole and secure it with the bolt.</li></ul> |                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                      |
|                                                                                                                                                                                                                                | <ul style="list-style-type: none"><li>- Connecting the cables backwards can damage the machine.</li><li>- When disconnecting the battery, always disconnect the negative (–) terminal first.</li><li>- When installing, using and maintaining the battery, follow the instructions described in the battery manual. At the same time, observe all of the manual's safety instructions.</li></ul> |                                                                                                      |

### 3.3.2 GRASS CATCHER

The grass catcher is delivered in a separate box. Some of its parts have been dismantled for transport and must be assembled first. Later chapters give a rough outline on assembling it. The complete process is shown on the DVD that is included or can be sent upon request.

#### ► **TOOLS NEEDED**

Prepare the following tools for assembling the catcher:

|                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |
| ▶ A knife for removing packing material                                             | ▶ A set of hexagonal socket wrenches and hex wrenches                               | ▶ Phillips screwdrivers or an electrical hand screwdriver                             |

#### ► **UNPACKING**

Remove the packing material. First remove the entire bag, frame and lid, and then unwrap the individual parts. Unpack these parts and clearly organize them in an appropriate place.

► **PACKAGE CONTENTS**

| 300-litre grass catcher                                                                                                                                                                      | <br>3.3.2a                                       | 360-litre grass catcher                                                                                                                                                                                                                   | <br>3.3.2b |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| (1) - Lid, frame and bag<br>(2) - Lifting lever<br>(3) - Corner braces (left and right)<br>(4) - Handle<br>(5) - Lower brace<br>(6) - Connecting nuts, bolts and washers<br>(7) - Lower tube |                                                                                                                                   | (1) - Lid, frame and bag<br>(2) - Lifting lever<br>(3) - Corner braces (left and right)<br>(4) - Handle<br>(5) - Handle gasket<br>(6) - Lower braces<br>(7) - Connecting nuts, bolts and washers<br>(8) - Lower tube<br>(9) - Side braces |                                                                                               |
|                                                                                                             | Four <b>replacement shear pins</b> for the cutting blades are packaged with the grass catcher.<br>Store these pins for later use. |                                                                                                                                                                                                                                           |            |

► **GRASS CATCHER - MAIN PARTS (TERMINOLOGY)**

|                                                                                                                                                                                                                                                                                                                                          |                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| (1) - Lid and upper handle<br>(2) - Left side braces<br>(3) - Front tube<br>(4) - Left side brace<br>(5) - Lower braces (just one for 300-litre and 360-litre versions)<br>(6) - Bag (mesh)<br>(7) - Control spring for emptying grass<br>(8) - Lower pipe<br>(9) - Right side braces<br>(10) - Right side brace<br>(11) - Lifting lever | <br><b>3.3.2c</b> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|

► **INSTALLING THE GRASS CATCHER**

|                                                                                                                                 |                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| ► Bolt the the grass catcher hangers and lower brace to the rear plate of the machine.                                          | <br><b>3.3.2d</b> |
|  Install the hanger only if using a trailer. |                                                                                                        |
| ► Adjust the tilt of the front tube downward.                                                                                   | <br><b>3.3.2e</b> |
| ► Unscrew the catcher's upper lid and set it aside.                                                                             | <br><b>3.3.2f</b> |
| ► Pull the rubber edge of the bag from the tubes, remove the whole bag and set it aside.                                        | <br><b>3.3.2g</b> |

|                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                             |                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| <p>► Into the upper holes in the brace that fastens the front tube above, insert M5x16 bolts, secure them with washers and nuts, and lightly tighten them. Also tighten the lower, pre-inserted bolts.</p>                                                                                                                                                           |                                                                                                                                                                                                             | <br><b>3.3.2h</b>   |
| <p><b>i</b></p>                                                                                                                                                                                                                                                                                                                                                      | <p>For the catcher on the 360-litre model, a spring (brace) must be bolted into the lower hole on the right-hand side of the front tube, for hitching up the basket.</p>                                    |                                                                                                        |
| <p>► Unscrew the two nuts on the opposite corners of the frame, slip the corner braces on and screw the nuts back on. Make sure not to get the left brace and right brace switched. The left brace is clearly marked "L".</p>                                                                                                                                        |                                                                                                                                                                                                             | <br><b>3.3.2i</b>   |
| <p>► Bolt the catcher's side braces on. The braces are fastened from the inside of the catcher using a bolt, washer and nut.</p>                                                                                                                                                                                                                                     |                                                                                                                                                                                                             | <br><b>3.3.2j</b>   |
| <p><b>i</b></p>                                                                                                                                                                                                                                                                                                                                                      | <p>For the catcher on the 360-litre model, ignore this point — the side braces are premounted.</p>                                                                                                          |                                                                                                        |
| <p>► Bolt the lower tube to the frame. For easier assembly, we recommend turning the catcher upside down. Fasten the lower tube from the lower side to the corner braces and to the front frame. After assembly, turn the catcher right side up.</p>                                                                                                                 |                                                                                                                                                                                                             | <br><b>3.3.2k</b>   |
| <p>► Slide the catcher bag back on. Pull the rubber edge of the bag over the tube.</p>                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                             | <br><b>3.3.2l</b>   |
| <p>► Bolt the two lower braces to the underside of the lower tube.</p>                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                             | <br><b>3.3.2m</b>   |
| <p><b>i</b></p>                                                                                                                                                                                                                                                                                                                                                      | <p>On the 360-litre model, only one lower brace is fastened. It is bolted to the side brace.</p>                                                                                                            |                                                                                                        |
| <p>► Insert the handle into the holes in the lid and slide the black washers onto the bolts. Then slide the plate onto the bolts and another set of washers.</p> <p>► Take this whole assembly and push it into the holes in the upper bracket of the frame, slide another set of washers onto the bolts and secure them all with nuts. Do not tighten them yet!</p> |                                                                                                                                                                                                             | <br><b>3.3.2n</b> |
| <p><b>i</b></p>                                                                                                                                                                                                                                                                                                                                                      | <p>For the catcher on the 360-litre model, first put on the washers (black) and after that insert the handle into the lid. Between the lid and the the basket structure there are washers but no plate.</p> |                                                                                                        |
| <p>► Bolt the lid to the frame and tighten the bolts.</p>                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                             | <br><b>3.3.2o</b> |
| <p>► Insert the emptying lever into the holes in the brace inside the catcher.</p> <p>► Into the lower end of the lever inside, insert a bolt and push its threaded portion through the hole. Secure it from above with a nut and tighten it.</p>                                                                                                                    |                                                                                                                                                                                                             | <br><b>3.3.2p</b> |
| <p>► Tighten the nut securing the handle. This completes installation of the grass catcher.</p>                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                             | <br><b>3.3.2q</b> |

#### ► **BALANCING AFTER INSTALLATION**

- Take hold of the grass catcher and hang it on the hangers on the rear plate of the machine.
- Check its fit to the fenders. Correct any imbalance by loosening the bolts in the front tube and/or the bolts in the side braces, evening it up and retightening the bolts.
- If the catcher cannot be fit in the manner explained above, balance it by shifting its hangers on the rear plate.
- After balancing the catcher, adhere the triangular sticker (included) on its lid. Place it across from the sticker that is already adhered to the machine's cover. The tips of the triangles must be in opposing positions.

## 3.4 INSPECTING BEFORE STARTUP

### 3.4.1 CHECKING THE ENGINE OIL

Before checking the oil, the tractor must be in a horizontal position. The oil cap can be accessed by lifting the seat. Unscrew the dipstick, wipe it clean, reinsert it and screw it back in. Then unscrew it again and read the oil level.



#### 3.4.1

Oil level on dipstick:

(1) - (ADD) oil is low

(2) - (FULL) oil is full

The oil level must be between the two marks on the dipstick. If it is not, add motor oil until it reaches the **"FULL"** mark. The oil type is designated in a separate manual from the engine manufacturer.



*The oil must be checked before every ride.*

### 3.4.2 BATTERY INSPECTION

Check the battery according to the manual provided by its manufacturer.

### 3.4.3 FILLING THE FUEL TANK

For safety reasons, the mower is transported without fuel, and it is necessary to fill the tank before starting up for the first time. Depending on the machine's design, the fuel tank is located either under the front bonnet or inside the left fender, and holds **7.5 litres** (model **AJ102**) or **12 litres** (model **AG122**) of fuel.

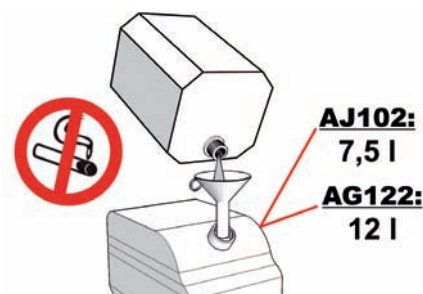


- Use only fuel of the octane rating designated in the engine manual. Defects caused by improper fuel are not covered by the warranty!
- Fill the tank only when the engine is switched off and is cool. Fill the tank in a well-ventilated area.
- When handling fuel, do not eat, smoke or use an open flame.
- For filling the tank, use a funnel intended for use with fuel.
- Make sure not to spill any fuel when filling the tank. Spilled fuel is highly flammable. If any fuel spills, wipe it up until dry.
- Store fuel out of the reach of children.

Filling process:

- ▶ Remove the fuel tank cap. Open it slowly, because the tank may contain pressurized petrol fumes.
- ▶ Insert the funnel into the filling port and pour in fuel from a canister.
- ▶ After filling the tank, always wipe dry the cap and the area around it. It is appropriate to check the fuel level through the lines.

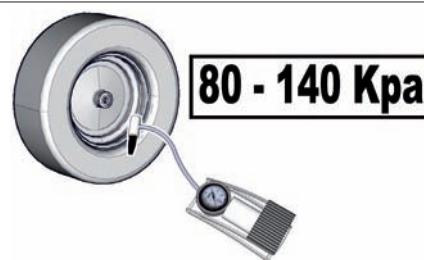
We also recommend cleaning the tank itself regularly, because any contaminants in the fuel can cause engine breakdown.



### 3.4.4 CHECKING TYRE PRESSURE

Before using the machine, check the air pressure in the tyres.

The air pressure in the front and rear tyres must be within the range of **80 -140 kPa**. The difference between the individual tyres can be **± 10 KPa**.



## 4. CONTROLLING THE MACHINE

### 4.1 CONTROL LAYOUT

|                                                                                   |             |                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>4.1a</b> | <ul style="list-style-type: none"> <li>(1) Accelerator lever</li> <li>(2) Indicator for the brake pedal and parking brake</li> <li>(3) Mowing function control switch when grass catcher is full</li> <li>(4) Switch for mowing mechanism</li> <li>(5) Main switch</li> </ul> |
|  | <b>4.1b</b> | <ul style="list-style-type: none"> <li>(6) Brake pedal</li> <li>(7) Parking brake control</li> <li>(8) Mulching lid lever</li> <li>(9) Forward drive pedal</li> <li>(10) Backup pedal</li> <li>(11) Mowing mechanism height adjustment lever</li> </ul>                       |

### 4.2 DESCRIPTION AND FUNCTION OF CONTROLS

#### 4.2.1 STANDARD CONTROLS

##### (1) ACCELERATOR LEVER

Regulates engine RPM. Has the following three positions:

|                                                                                     |                                                                                     |                 |                          |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------|--------------------------|
|  |  | <b>STARTER*</b> | To cold start the engine |
|                                                                                     |  | <b>MAX</b>      | Maximum RPM              |
|                                                                                     |  | <b>MIN</b>      | Minimum RPM (idle)       |

\* Only on machines with engines BS15, BS17, KO15, TE17 and HO16

##### (2) INDICATOR FOR THE BRAKE PEDAL AND PARKING BRAKE

This indicator signals that the brake pedal has been pressed or the parking brake engaged.

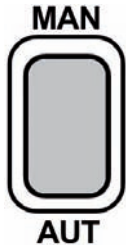
|                                                                                     |                                                                                     |                                 |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------|
|  |  | Parking brake engagement signal |
|                                                                                     |  | Brake pedal indicator           |

##### (3) Mowing function control switch when grass catcher is full (optional equipment)

The AUT/MAN switch turns the mowing function (of the mowing mechanism) on and off when the grass catcher is full.

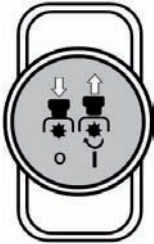
In the **MAN** position, mowing is on all the time, and if the grass catcher is full, the removal tube can fill with clippings. This position is meant only for short-term use, when mowing small, leftover areas.

In the **AUT** position, mowing is switched off automatically at the moment the grass catcher is full.

|                                                                                   |            |                    |                           |
|-----------------------------------------------------------------------------------|------------|--------------------|---------------------------|
|  | Position   | Grass catcher full | Mowing mechanism and gear |
|                                                                                   | <b>AUT</b> | <b>NO</b>          | <b>ON</b>                 |
|                                                                                   | <b>AUT</b> | <b>YES</b>         | <b>OFF</b>                |
|                                                                                   | <b>MAN</b> | <b>NO</b>          | <b>ON</b>                 |
|                                                                                   | <b>MAN</b> | <b>YES</b>         | <b>ON</b>                 |

#### (4) MOWING MECHANISM SWITCH

Pulling the switch upward turns the mowing mechanism on. Pressing downward shuts the mowing mechanism off.

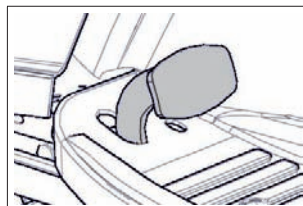
|                                                                                   |                                                                                   |     |                                                           |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----|-----------------------------------------------------------|
|  |  | OFF | Turning on the mowing mechanism / mowing mechanism is off |
|                                                                                   |  | ON  | Turning on the mowing mechanism                           |

#### (5) MAIN SWITCH

Turns the engine on and off. Has the following three positions:

|                                                                                     |                                                                                     |                                          |  |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------|--|
|  |   | Ignition is off / turn off ignition      |  |
|                                                                                     |  | Turning the bonnet headlights on and off |  |
|                                                                                     |  | Ignition is on, the engine is running.   |  |
|                                                                                     |  | Engine start-up – start-up position      |  |

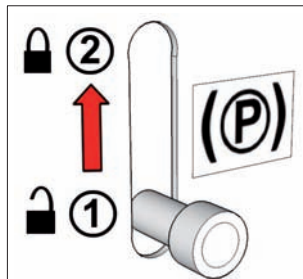
#### (6) BRAKE PEDAL



Stepping on the brake pedal stops the mower.

The pedal is also used when starting the machine, which can be started only when the brake pedal is pressed.

#### (7) PARKING BRAKE LEVER



The parking brake lever has two positions. In position (1), the brake is inactive. When it is moved to position (2) while pressing the brake pedal, the parking brake is engaged.

Stepping on the brake pedal disengages the parking brake, automatically releasing the lever and moving it to position (1).

## (8) MULCHING LID LEVER

This lever has two functions:

- 1) **Mulching** – grass clippings are spread underneath the lawn mower
- 2) **Grass collection** – grass clippings are collected in the grass catcher



*When shifting the lever from the collection position to the mulching position (downward), stop the machine and allow the mowing mechanism to run for about 20 seconds to clear remaining grass from the removal tube. Only then should you shift the lever to mulching position and drive on. Not following this procedure can cause the lid to operate incorrectly and can clog the removal tube.*

### ► **SETTING THE LEVER TO MULCH**



**4.2.1a**

- (1) Default state
- (2) Lift lever
- (3) Turn it to the left (counter-clockwise)
- (4) Push the lever down
- (5) Turn it to the right (clockwise)
- (6) The lever will move down to the correct position by itself

### ► **SETTING THE LEVER TO COLLECT GRASS**



**4.2.1b**

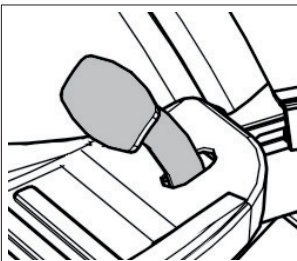
- (1) Default state
- (2) Lift lever
- (3) Turn it to the left (counter-clockwise)
- (4) Turn it to the right (clockwise)
- (5) The lever will move downward by itself to a position that does not impede work



*So that the mulching lid will work correctly, after finishing work, thoroughly clear the mowing mechanism and discharge tube of clippings and contaminants.*

## (9) FORWARD DRIVE PEDAL

This pedal controls the drive wheels and regulates the machine's **forward** movement.



The closer to the floor you press the pedal, the faster the machine goes, and vice versa.

When released, the pedal automatically returns to the neutral position and the machine stops.

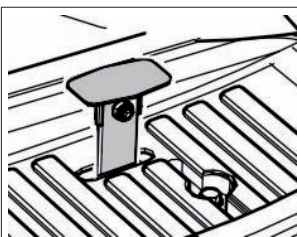
For more details **5.5.**



**ATTENTION: A forward/backward change in direction is possible only after the machine has stopped!**

## (10) BACKUP PEDAL

This pedal controls the drive wheels and regulates the machine's **backward** movement.



The closer to the floor you press the pedal, the faster the machine goes, and vice versa.

When released, the pedal automatically returns to the neutral position and the machine stops.

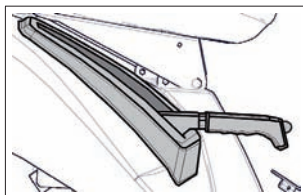
For more details **5.5.**



**A forward/backward change in direction is possible only after the machine has stopped!**

### (11) MOWING MECHANISM HEIGHT ADJUSTMENT LEVER

This lever sets the height of the mowing mechanism from the ground.



The lever has **7** working positions for cutting heights from **3 to 9 cm**.

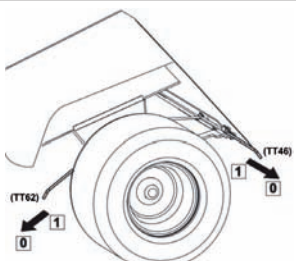
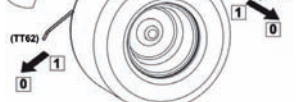
The higher the lever's position number, the taller the grass will be after cutting.



*When driving the machine without mowing, the lever must be set to **7**.*

### (12) BYPASS LEVER – FREE MOVEMENT OF REAR WHEELS

The bypass lever is for cutting off power to the rear wheels so that the machine can be pushed or pulled without the engine. Depending on the transmission used, it is located either **behind** the left rear wheel (**TT46**) or **in front of** the left rear wheel (**TT62**). It has the following two positions:

|  | Position   | Rear-wheel drive | Use                                        |
|-----------------------------------------------------------------------------------|------------|------------------|--------------------------------------------|
|                                                                                   | <b>(0)</b> | OFF              | When pushing the machine, the engine idles |
|  | <b>(1)</b> | ON               | When driving, the engine is running        |

## 4.2.2 OPTIONAL CONTROLS

### (1) STARTER

For cold starting the engine.



Machines with engines BS15, BS17, KO15, TE17 and HO16 are not equipped with separate starters.

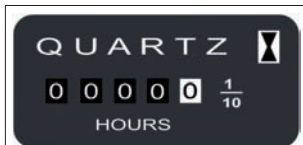
### (2) BUZZER

The buzzer gives off an audible signal when the grass catcher is full.



*After the audio signal that the catcher is full, power to the mowing mechanism is not shut off!*

### (3) ENGINE HOUR GAUGE



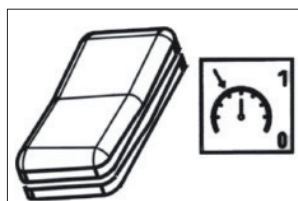
The engine hour gauge operates only when the ignition is on and the seat switch is engaged (automatically by the operator's weight).



- Unauthorized modification of the gauge will void the warranty.
- If the counter breaks down, contact your service centre immediately.

#### (4) CRUISE CONTROL

The cruise control is used only on long, straight drives. Cruise control must be turned off before any change in direction.

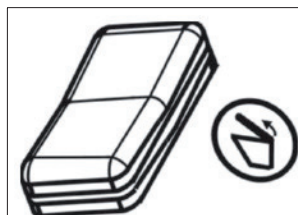


Cruise control is on only when the ignition is on.

The cruise control can be turned off by stepping on the pedal or shutting off the switch.

#### (5) GRASS CATCHER TILT SWITCH

This switch automatically tilts the grass catcher up or down.

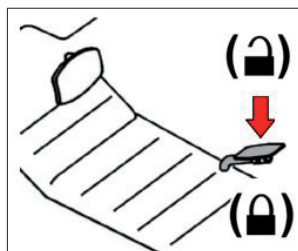


To lift or release the catcher, the switch must be held down.

As soon as the grass catcher is at the up or down end position, immediately release the switch. Doing otherwise can cause electrical failure.

#### (6) AXLE LOCK PEDAL

This pedal is used only when necessary and only when driving directly forward.



Pressing the pedal downward engages the lock.

Releasing the pedal automatically disengages the lock.



***Never use the axle lock when you change driving direction. Otherwise, you may seriously damage the transmission!***

## 5. OPERATING THE MACHINE



### **Good information to know before starting your mower for the first time:**

- ▶ The mower is equipped with safety contacts that are triggered:
  - by a switch located below the seat
  - a switch mounted in the grass catcher or deflector
  - the grass catcher fill switch
  - the brake pedal switch
- ▶ The engine automatically stops if the operator leaves the seat and the machine is not secured by the parking brake.
- ▶ The engine can be started only when the mowing mechanism is turned off and the grass catcher or deflector is installed and the brake pedal is pressed. The deflector prevents clippings from entering the intake tube to the grass catcher.

### 5.1 INSPECTING BEFORE STARTUP

Before starting the mower, check the following:

- ▶ The engine oil level (📖 **3.4.1**)
- ▶ The battery status (📖 **3.4.2**)
- ▶ The fuel level (📖 **3.4.3**)
- ▶ The tyre pressure (📖 **3.4.4**)

## 5.2 STARTING THE ENGINE

- a) Step on the brake pedal.
- b) Set the mowing mechanism height lever to position "7".
- c) On motorized machines, open the fuel cap (*only on machines with 15.5-hp BS15 engines*).
- d) Set the accelerator lever as follows:
  - On machines with 2-cylinder engines, to the "MAX" position
  - On machines with 1-cylinder engines, to the "STARTER" position
- e) Pull out the starter (*only on engines with 16 hp or more*)
- f) Turn the key to the "Start engine" position to turn on the ignition. Let go of the key after starting. The key will automatically return to the "Ignition ON" position.



*As soon as the engine turns over, let go of the ignition key. **The starting time must not exceed 10 seconds. Otherwise the switch may be damaged.***

- g) Plug in the starter (*only on machines with 2-cylinder engines*)
- h) Slowly move the accelerator lever to "MIN" position.



*Let the engine run for a few minutes before engaging the mowing mechanism.*



*- **Never** let the engine run in a closed or badly ventilated area. Exhaust gases can endanger your health.*

*- Keep your feet, hands and loose clothing **away from** exhaust and moving parts.*

## 5.3 SHUTTING OFF THE ENGINE

- a) Move the fuel control lever to the "MIN" position.
- b) If the mowing mechanism is turned on, shut it off by pressing the switch downward.
- c) Shut off the engine by turning the key to the "STOP" position and remove the key from the ignition.



*If the engine is too hot, let it idle for a while.*



*- **Never shut the engine off just by leaving the driver seat. Leaving the key in the ignition in "ON" position may damage the electrical system.***

*- **Always turn the key to the "OFF" position and remove it from the ignition. This prevents children and unauthorized persons from starting the machine.***

*- **Before turning off the ignition, slow the engine to idle in the case of self-ignition. Not doing this can damage the engine and exhaust.***

### 5.3.1 LEAVING THE MACHINE WITH THE ENGINE RUNNING

If you want or need to leave the machine for a while (to remove obstacles, etc.) and you intend to continue work afterward, you can **dismount the machine and leave the engine running**. This conserves the battery.

**Conditions for dismounting the machine with the engine running:**

- ▶ the mowing mechanism is off
- ▶ the fuel control lever is in the "MIN" position
- ▶ the machine is out of gear and the hand brake is engaged

## 5.4 TURNING THE MOWING MECHANISM ON AND OFF

### 5.4.1 TURNING THE MOWING MECHANISM ON

- ▶ Move the accelerator lever to "MAX" position.

- ▶ Use the mowing mechanism height lever to set the mechanism's working position and thereby the cutting height.
- ▶ Set the mowing mechanism switch to "ON".

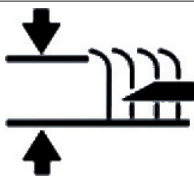
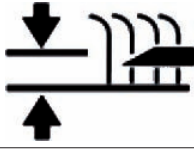
|                 |                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>i</b></p> | <p><b>Conditions for turning on the mowing mechanism:</b></p> <ul style="list-style-type: none"> <li>- the driver is sitting on the driver seat</li> <li>- the grass catcher or deflector is installed</li> <li>- the AUT/MAN switch (optional equipment) is in the "AUT" position and the basket is empty</li> <li>- the AUT/MAN switch (optional equipment) is in the "MAN" position</li> </ul> |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

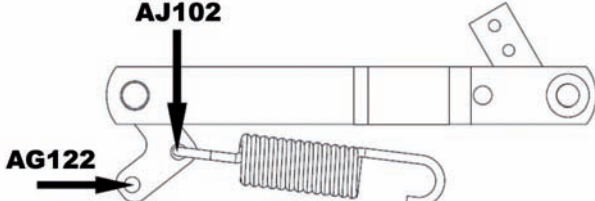
#### 5.4.2 TURNING THE MOWING MECHANISM OFF

- ▶ Shut off the mowing mechanism by pressing the switch downward.

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>!</b></p> | <ul style="list-style-type: none"> <li>- If the driver leaves the seat, the engine will stop automatically and this will also stop the blades from revolving.</li> <li>- However, never shut off the mowing mechanism just by leaving the seat. If you don't switch the ignition key from "ON" to "STOP", part of the electrical system is still charged and this can result in damage. The engine hour gauge also remains active.</li> </ul> |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### 5.4.3 SETTING THE HEIGHT OF THE MOWING MECHANISM

|                                                                                                               |                                                                                       |
|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <p>▶ If you want to set the mowing mechanism <b>higher from the ground</b>, move its lever <b>upward</b>.</p> |   |
| <p>▶ If you want to set the mowing mechanism <b>closer to the ground</b>, move its lever <b>downward</b>.</p> |  |

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>i</b></p> | <ul style="list-style-type: none"> <li>- Position "1" is used for duplicating uneven terrain. Do not use this height setting permanently, because it will wear out the mowing mechanism's parts faster.</li> <li>- The mowing mechanism is equipped with four travel wheels that lift the frame on uneven terrain and thereby protect the blades from damage.</li> <li>- If you want to reduce the control force that lifts the mowing mechanism on an AG122 machine, change the auxiliary spring attachment to the left side. The factory default settings are:</li> </ul> <div data-bbox="620 1618 1217 1818" data-label="Image">  </div> |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### 5.4.4 BALANCING THE MOWING MECHANISM

For best mowing results, the mowing mechanism must be set to the correct height. The adjustment process is explained in chapter "6.3.7 MOWING MECHANISM - INSPECTION AND ALIGNMENT" of this manual.

## 5.5 DRIVING THE MACHINE

### General warning before driving:

- ▶ Make sure **the parking brake is disengaged**. The parking brake lever must not remain in position "2" (4.2). The parking brake automatically releases when the service brake pedal is pressed.
- ▶ The bypass lever must be set to position "1", i.e., **the bypass must be turned off**.
- ▶ When driving toward the mowing area, **the mowing mechanism must be turned off and set to the highest position**, i.e., the mowing mechanism's height adjustment lever must be in position "7".
- ▶ **When driving over an obstacle more than 8 cm high** (curbs, etc.), **ramps** must be used to prevent damage to the mowing mechanism and transmission.
- ▶ **Avoid** colliding the **front wheels** hard with **solid obstacles**. This can damage the front axles, especially at high speeds.

### 5.5.1 DRIVING FORWARD/BACKWARD

- ▶ Slowly move the accelerator lever to "**MIN**" position. This reduces engine RPM.
- ▶ Slowly depress the accelerator pedal according to the desired driving direction (forward or reverse).

|                                                                                   |                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <i>Caution! Pressing the pedal quickly can cause an accident!</i>                                                                                                                                                                                                         |
|  | <b>- A forward/backward change in direction is possible only after the machine has stopped.</b> Not stopping the machine can damage the transmission.<br><b>- Never use the accelerator pedal and the brake pedal at the same time.</b> This can damage the transmission. |

### 5.5.2 STOPPING

Stop the machine's movement forward/backward by **gently letting up on the accelerator pedal** and then **pressing the brake pedal**.

|                                                                                     |                                                                                                                                                                                |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <i>When pressing the brake pedal while the cruise control is active, the accelerator pedal automatically moves to the neutral position. Braking distance is less than 2 m.</i> |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 5.5.3 DRIVING AND MOWING SPEED

- ▶ It is generally true that **the wetter, the higher and the thicker the grass, the lower the speed** you should drive at. At too high a vehicle speed or under a heavy load, the blade RPM drops, reducing cutting quality, and the removal tube may clog. Under such conditions, always set the engine to maximum RPM.
- ▶ If **the grass is very tall**, it has to be **cut more than once**. Do the first cut at maximum height or at a smaller row width. Do the second cut at the desired height.
- ▶ We recommend cutting **lengthwise or crosswise**. Overlapping rows makes the blades more effective and improves the appearance of the mowed area.
- ▶ When riding on an uneven surface, the driving speed may vary.

Recommended driving speeds by condition:

| State of growth                      | Recommended speed |
|--------------------------------------|-------------------|
| Tall, thick and wet                  | 2 km/h            |
| Ordinary conditions                  | 3 – 5 km/h        |
| Short, dry grass                     | < 5 km/h          |
| Riding with the mowing mechanism off | < 7 km/h          |

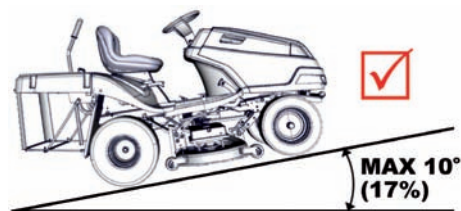
### 5.5.4 DRIVING ON A SLOPE

Mower models **AJ102** and **AG122** can work on slopes up to **10° (17%)**.

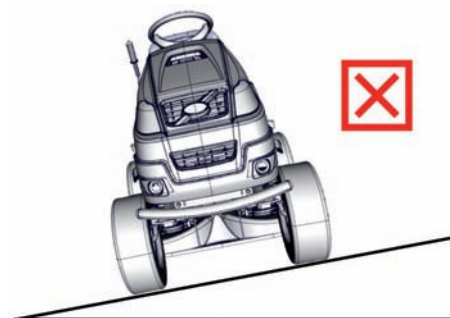
When working on a slope, the following principles must be observed:

- ▶ Be extra careful when riding on a slope.
- ▶ Always drive at a slower speed.
- ▶ Drive only perpendicularly to the contour line, i.e., up and down. Riding in the direction of the contour is prohibited. Avoid riding along the contour whenever possible.
- ▶ When turning, take care that the higher wheels do not ride over an elevated obstacle (stone, tree root, etc.).
- ▶ Drive more slowly downhill and over obstacles. Take extra care when turning on slopes or hills.
- ▶ When stopping the machine on a slope, always use the parking brake.

**Right**



**Wrong**



*Overloading the machine while driving on a slope more than 10° can damage the transmission. The manufacturer is not responsible for such damage.*

### 5.6 EMPTYING THE GRASS CATCHER

The grass catcher fill level is signalled by the basket fill lid. The basket fill can be regulated using the sliding parts of the lid (lengthening or shortening of the arm).

- (1) Sliding part pulled out = minimal basket fill
- (2) Sliding part pushed in = maximum basket fill



**5.6a**

#### Emptying process:

- ▶ Drive the machine to the place where you want to empty the grass catcher. Stop the machine and set the brake. If it is on a slope, use the parking brake.
- ▶ Shut off the mowing mechanism by pressing the switch downward.
- ▶ If the machine has an AUT/MAN switch, leave it in the **"AUT"** position.
- ▶ Set the accelerator lever to the **"MIN"** position.

#### ▶ On machines with hand-lifted and -tilted catchers:

Slide the catcher's lifting lever completely up (1) and by tilting it (2) empty the catcher. Let it empty freely, gradually loosen it and tilt it back.



**5.6b**

#### ▶ On machines with mechanically lifted and tilted catchers:

Press the catcher's emptying switch to the **"LIFT"** position and hold it down until the catcher has risen all the way. After the position is reached, let up on the switch and wait for the catcher to empty. Then press the switch back to the **"START"** position and hold it down until the catcher has tilted all the way. After the position is reached, let up on the switch.

- ▶ After tilting the catcher to the basic position, turn the mowing mechanism on using the lever switch.

## 6. MAINTENANCE AND ADJUSTMENTS

Proper, regular maintenance and inspection of the machine helps extend the mower's life and problem-free operation. Worn-out or damaged parts must be replaced in a timely manner. Always use original replacement parts. Other replacement parts can damage the machine and endanger the health of the driver and other persons and void warranty claims. To order replacement parts, always contact the manufacturer or an authorized service facility.

## 6.1 OVERVIEW OF INSPECTION AND MAINTENANCE

| <br>Activity | <br>INTERVAL |                         |                         |                |         |                             |                  |     |                      |                                           |
|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------|-------------------------|----------------|---------|-----------------------------|------------------|-----|----------------------|-------------------------------------------|
|                                                                                               | Regular maintenance                                                                           |                         |                         |                |         | Maintenance by hours of use |                  |     | Seasonal maintenance |                                           |
|                                                                                               | Before each use                                                                               | After the first 2 hours | After the first 5 hours | After each use | Monthly | 25                          | 50               | 100 | Before mowing season | After mowing season (storing the machine) |
| Check the oil (transmission, engine)                                                          | ⦿                                                                                             | ⦿                       |                         |                |         |                             |                  |     |                      |                                           |
| Change the engine oil                                                                         |                                                                                               |                         | ⦿                       |                |         | ⦿ <sup>1,2</sup>            |                  |     |                      | ⦿                                         |
| Fuel filter change                                                                            |                                                                                               |                         |                         |                |         |                             |                  |     | ⦿                    |                                           |
| Battery maintenance (checking electrolytes and cleaning)                                      |                                                                                               |                         |                         |                |         | ⦿                           |                  |     | ⦿                    |                                           |
| Inspect and adjust the drive belt                                                             | ⦿                                                                                             |                         | ⦿ <sup>4</sup>          |                |         | ⦿                           |                  |     | ⦿                    |                                           |
| Check the brake control                                                                       | ⦿                                                                                             |                         |                         |                |         |                             |                  |     |                      |                                           |
| Inspect tyre pressure                                                                         | ⦿                                                                                             |                         |                         |                | ⦿       |                             |                  |     |                      |                                           |
| Check cable connections (loose connectors)                                                    | ⦿                                                                                             |                         |                         |                |         |                             |                  |     |                      | ⦿                                         |
| Clean the mowing mechanism                                                                    |                                                                                               |                         |                         | ⦿              |         |                             |                  |     |                      | ⦿                                         |
| Check screw connections                                                                       | ⦿                                                                                             |                         |                         | ⦿              |         | ⦿                           |                  |     |                      |                                           |
| Check tension of toothed belt that rotates the blades                                         | ⦿                                                                                             |                         | ⦿ <sup>4</sup>          |                | ⦿       |                             |                  |     | ⦿                    |                                           |
| Check the V-belt tension on the mowing mechanism drive                                        | ⦿                                                                                             |                         | ⦿ <sup>4</sup>          | ⦿              |         |                             |                  |     | ⦿                    |                                           |
| Check and adjust play of front axle and steering                                              |                                                                                               |                         |                         |                |         | ⦿                           |                  |     | ⦿                    |                                           |
| Check operation of safety switches and devices                                                | ⦿                                                                                             |                         |                         |                |         |                             |                  |     |                      |                                           |
| Check and adjust engine operation, transmission and electromagnetic connectors                |                                                                                               |                         |                         |                |         |                             |                  | ⦿   |                      |                                           |
| Check and maintain air filter, spark plugs, and change if necessary                           |                                                                                               |                         |                         |                |         |                             | ⦿ <sup>1,2</sup> |     |                      |                                           |
| Check mowing mechanism (play, shaft alignment, inspect and sharpen blades)                    |                                                                                               |                         |                         |                |         | ⦿ <sup>3</sup>              |                  |     |                      |                                           |

### Notes to chart:

1 = Change the oil more often if the lawn mower has worked with a higher load or in outdoor temperatures of 35°C or higher.

2 = Check more often if the machine operates in a dusty environment.

3 = Check more often if the machine works in a sandy environment.

4 = Check more often if the a new belt has been installed.

## 6.2 DAILY INSPECTION AND MAINTENANCE

|                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"><li>- Before beginning any maintenance or service, familiarize yourself again with all instructions, restrictions and recommendations in this manual.</li><li>- Before cleaning, maintenance or repair, always remove the key from the ignition.</li><li>- When working, always wear appropriate work clothes and shoes. When handling the cutting blades or during activities that pose a cutting risk, wear appropriate work gloves.</li><li>- Avoid spilling fuel, oil or other hazardous substances.</li></ul> |
|  | <p>Dispose of used oil, fuel or other hazardous substances according to applicable environmental protection laws.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                |

### 6.2.1 BEFORE STARTING WORK

#### ► **TYRE PRESSURE INSPECTION**

Inspect the tyre pressure regularly and make sure it meets requirements. Maintaining the specified pressure is important to even mowing. Other pressure values can hamper driving and even result in loss of control.

The air pressure in the front and rear tyres must be within the range of **80 - 140 kPa**, and the difference between the individual tyres can be **± 10 kPa**.

#### ► **CHECKING THE OIL**

Place the lawn mower on a level surface. Open the bonnet and unscrew the cap of the filling port. Unscrew the dipstick, wipe it clean, reinsert it and screw it back in. Then unscrew it again and read the oil level.

The oil level must be between the two marks on the dipstick. If it is not, add motor oil until it reaches the **"FULL"** mark.



Further information on checking and adding oil is given in a separate manual provided by the engine manufacturer.

#### ► **CHECKING CABLES AND SCREW CONNECTIONS**

Visually inspect the state of the cables and manually check tightness of screw connections.

#### ► **CHECKING BRAKE FUNCTION**

Check the brakes for proper operation. Proceed as follows:

- Set the machine on a level surface and shut off the engine.
- Press the brake pedal and engage the parking brake.
- Use the bypass lever to cut off power to the rear wheels.
- Try to push the machine forward manually. If the rear wheels turn, brake service is needed. Contact an authorized service facility that will adjust them.

### 6.2.2 AFTER FINISHING WORK

#### ► **MACHINE SETTINGS**

After mowing, raise the mowing mechanism to the highest position and shut off power to the rear wheels.

Turn off the ignition, press the brake pedal and use the parking brake to keep the machine in position. On machines with BS15 (15.5-hp) engines, close the fuel intake.

#### ► **CLEANING THE MACHINE**

Remove all dirt and clippings from the tractor's surface, the removal tube and the mowing mechanism.

Thoroughly clean the grass catcher's fabric bag. If grass is stuck to it, the machine can't fill the grass catcher as well.

### ► **WASHING THE MACHINE**

Before washing, park the machine on an appropriate level surface.

#### ► Grass catcher:

- remove the grass catcher from the machine, wash it and let it dry.

#### ► Plastic parts:

- clean with a sponge and soapy water.

#### ► Mowing mechanism:

- wash from inside, including internal parts and removal tube.
  - slip a hose of an appropriate diameter onto the mechanism's cover extension. Start the engine, start the mowing mechanism and rinse the mowing mechanism for 10 minutes.
- This rinse must be performed after every mowing.



**6.2.2**



*Avoid washing with water near electrical equipment on the instrument panel, battery, etc.*

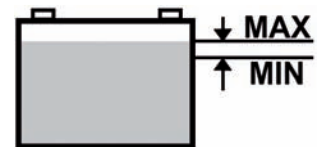
## **6.3. REGULAR INSPECTION, MAINTENANCE AND ADJUSTMENTS**

### **6.3.1 BATTERY**

Correct, regular maintenance increases the life of the battery. You should therefore check it according to the battery manufacturer's instruction manual.

► Keep the battery contacts clean. If they get dirty or corroded, clean them according to the manufacturer's instructions.

- Regularly check the electrolytes. The level should be between the MIN and MAX marks. For filling the electrolytes, use only distilled water.



► A drained battery must be charged as soon as possible. Otherwise the cells may be irreversibly damaged.

► The battery must always be charged before:

- first use
- during a long storage period
- before operation after a long storage period

► If the battery needs to be changed, always use a battery of the same size and model.



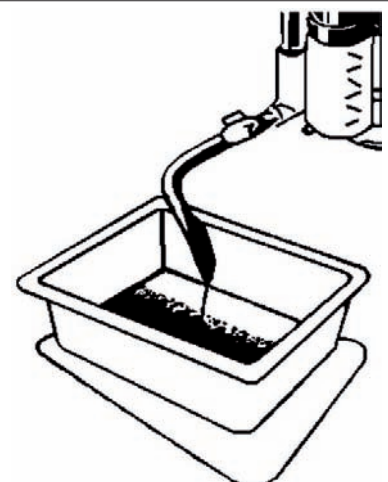
*Further information on checking and maintaining the battery is given in a separate manual provided by its manufacturer.*

### **6.3.2 ENGINE**

#### ► **CHANGING THE OIL**

Before changing the oil, prepare a container of at least **2 litres**. For all oil to drain from the engine, we recommend tilting the machine (such as with wooden blocks) on the opposite side from the drain plug.

- Remove the oil filler cap so that the oil will drain better and faster.
- Unscrew the drain plug and let the oil drain completely into the prepared container.
- Screw the drain plug back in, pour in the right amount of the specified oil ( **Engine operation manual**) and close the oil filler cap.
- Use the dipstick to check the oil level. If necessary, add oil to the proper level.



|                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <i>Further details on checking and adding oil, including information on the type and amount of oil, are given in a separate manual provided by the engine manufacturer.</i>                                                                                                                                                                                                                                                              |
|  | <ul style="list-style-type: none"> <li>- If you come into contact with used oil, we recommend thoroughly washing your hands with soap and water.</li> <li>- Dispose of used oil according to environmental protection rules. Properly transport the oil in a closed container to a used oil collection point. Never discard used oil with ordinary refuse, and do not pour it down the sewer, into garbage or into the earth.</li> </ul> |

### ► **AIR FILTER MAINTENANCE**

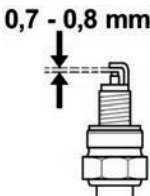
Never let the engine run without the air filter. This will wear out the engine quickly.

|                                                                                   |                                                                                                                       |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
|  | <i>Maintain the air filter according to the instructions given in the manual provided by the engine manufacturer.</i> |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|

### ► **SPARK PLUG MAINTENANCE**

For perfect engine operation, the spark plug must be correctly installed and cleaned of deposits.

|                                                                                   |                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"> <li>- Always use only the plug specified by the engine manufacturer!</li> <li>- If the engine has been running shortly before inspection and replacement, the spark plug is very hot. Be careful not to burn yourself.</li> </ul> |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>► Disconnect the spark plug cable and remove the plug with a spark plug wrench.</li> <li>► Visually check the appearance of the plug. If the plug is visibly very worn or has a broken or scaled insulator, it must be replaced.</li> <li>► If the plug is soiled or just mildly worn, it must be carefully cleaned with an appropriate (copper) wire brush.</li> <li>► Use a gauge to set the spark plug gap ( <b>Engine operation manual</b>).</li> <li>► After maintenance or replacement, properly tighten the plug. An improperly tightened plug gets very hot and can cause serious engine damage.</li> </ul> |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|

|                                                                                     |                                                                                                                                            |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
|  | <i>Inspect, maintain and replace the spark plug according to the instructions given in the manual provided by the engine manufacturer.</i> |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|

### ► **CHANGING THE FUEL FILTER**

Never let the engine run without the air filter. This will wear out the engine quickly.

|                                                                                     |                                                                                                                      |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
|  | <i>Change the fuel filter according to the instructions given in the manual provided by the engine manufacturer.</i> |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|

## 6.3.3 REPLACING LIGHT BULBS

Depending on the model, light bulbs are installed either in a bayonet socket or a reflector, and they are accessible by opening the bonnet.

Types of light bulbs:

| Type of bulb:                  | Socket/reflector:                                                     | Replace with:                                                 |
|--------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------|
| K20, 12V / 10W                 | Bayonet socket                                                        | K20, 12V / 10W or equivalent from another manufacturer        |
| Halogen light bulbs, 10W / 12V | M Light reflector, model HLRG-510F, diameter 51 mm (screw cap GU5,3)  | M light model HSS-510 or equivalent from another manufacturer |
| Halogen light bulbs, 10W / 12V | M Light reflector, model HLRG-35/520F, diameter 35 mm (screw cap GU4) | M light model HSS-520 or equivalent from another manufacturer |
| Halogen light bulbs, 20W / 12V | M Light reflector, model HLRG-35/520F, diameter 35 mm (screw cap GU4) | M light model HSS-520 or equivalent from another manufacturer |

|                                                                                                                                                                                                   |                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| ▶ When replacing a <b>light bulb that has a bayonet</b> simply turn (loosen) the burnt-out bulb and remove it from the socket. Then insert a new bulb into the socket and turn it until it locks. | <br><b>6.3.3a</b> |
| ▶ When changing a <b>halogen bulb</b> first release the three metal brackets, remove the burnt-out bulb, insert a new one, and reengage the brackets.                                             | <br><b>6.3.3b</b> |

### 6.3.4 REPLACING FUSES

If a fuse fails, the engine will immediately quit, the mowing mechanism will stop, and all gauges on the instrument panel will go dark. In that case, it is necessary to seek out the blown fuse and replace it with a new one.

The fuses are located on the steering column and can be accessed by lifting the cover and removing the protective fuse cover.

- ▶ Remove the fuse and insert a new fuse of the same rating as the original one, i.e., **15A** or **5A**. If the engine or the mowing mechanism cannot be started after fuse replacement, contact your authorized service centre.

### 6.3.5. RAISING THE MACHINE

If you want to raise the lawn mower, use a jack and supports.

Proceed as follows:

- ▶ Place the jack under the transmission on the rear axle and raise the machine's rear end.
- ▶ Insert two supports under the ends of the axle inside the rear wheels.
- ▶ Lift the front end of the machine and insert two supports under each end of the front wheel pins.

|                                                                                     |                                                                                                                                    |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
|  | <i>Never tilt the machine to the side where the engine's carburettor is located. This could make oil seep into the air filter!</i> |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|

### 6.3.6 MOWING MECHANISM - SHARPENING AND CHANGING BLADES

#### ▶ **SHARPENING BLADES**

The cutting blades must be sharp, statically balanced and straight. Blunt, improperly sharpened or damaged blades uproot grass, damage the lawn and don't allow the catcher to collect grass properly.

|                                                                                     |                                                                                                                                                                          |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>- Never repair a deformed or otherwise damaged blade. Always replace it immediately.</b></p> <p><b>- Whenever handling the blades, wear solid work gloves.</b></p> |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Sharpening process:

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>▶ Remove the grass catcher, tilt the machine to the right side, and place appropriate pads under it. We recommend having another person help, in order to avoid injury and damage to the machine.</li> <li>▶ Unbolt both blades and clean them. If the machine is equipped with <b>TRIPLEX</b> blades, remove each blade from the holder.</li> <li>▶ First sharpen the blades with a grinder, and then with a file. For <b>TRIPLEX</b> blades, grind each separately.</li> </ul> | <br><b>6.3.3a</b> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|

|                                                                                     |                                                                    |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------|
|  | <b>Do not sharpen the blades directly on the mowing mechanism.</b> |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------|

- ▶ After sharpening, do not reinstall the blades yet, but check their balance. See the procedure below.

|                                                                                                                                                                                                                                                          |                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>▶ Before reinstalling the blades, check the shear pins that protect the mowing mechanism from damage. If the shear pins are damaged, replace them immediately. Replacement pins come with the machine.</li> </ul> | <br><b>6.3.3b</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|

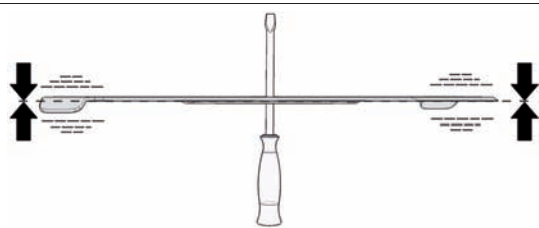
- ▶ After checking the balance and the shear pins, bolt the blades back on. When installing, make sure the blades do not face upward inside the mowing mechanism cover. Do not switch the left one with the right one. The right blade has leftward threads.

- ▶ Carefully tighten the blades' mounting bolts using a torque wrench set to  $\pm 3$  Nm. This torque is reached at exactly the moment when the tangential spring under a blade's mounting bolt is completely compressed. After that, do not tighten the screw further.

### ▶ **BALANCING THE BLADES**

Use great care when aligning and balancing the blades. Vibration from misaligned and unbalanced blades can damage the engine or mowing mechanism.

When balancing, insert a screwdriver into the centring hole and place the blade in horizontal position. If the blade stays in this position, it is balanced. If one of the ends of the blade is heavier, grind this side until it is balanced. When grinding for balance, do not shorten the blade! The maximum static balance is 2 g.



*If you are not sure of the procedure, contact your authorized service centre, where they will gladly advise you.*

### ▶ **REPLACING BLADES**

If the blades have been damaged by frequent use, they cannot be properly sharpened and must be replaced. Proceed as follows:

- ▶ Remove the grass catcher, tilt the machine to the right side, and place appropriate pads under it. We recommend having another person help, in order to avoid injury and damage to the machine.
- ▶ Unbolt both blades. If the machine is equipped with **TRIPLEX** blades, remove each blade from the holder.
- ▶ Before installing the new blades, check the shear pins that protect the mowing mechanism from damage. If the shear pins are damaged, replace them immediately.
- ▶ Check the new blades' balance. See above.
- ▶ Bolt the new blades on. When installing, make sure the blades do not face upward inside the mowing mechanism cover. Do not switch the left one with the right one. The right blade has leftward threads.
- ▶ Carefully tighten the blades' mounting bolts using a torque wrench set to  $\pm 3$  Nm. This torque is reached at exactly the moment when the tangential spring under a blade's mounting bolt is completely compressed. After that, do not tighten the screw further.



- **As soon as the blades meet a hard object, stop the engine immediately and check them! The shear pins may be damaged or severed.**
- **Whenever handling the blades, wear solid work gloves.**

## 6.3.7 MOWING MECHANISM - INSPECTION AND BALANCING

For best mowing results, the mowing mechanism must be set to the correct height from the ground, and each side of the mechanism must be level.

Before adjustment:

- ▶ Place the machine on a **perfectly level surface, inflate all tyres to the rated pressure** (80 - 140 kPa,  $\pm 10$  kPa between the individual tyres) and **secure the whole machine against movement** (e.g., with an appropriate wedge, etc.).
- ▶ Set the mowing mechanism height lever to position **2**.

### ▶ **ADJUSTING THE HEIGHT OF THE MOWING MECHANISM IN THE DRIVING DIRECTION**

- ▶ Check the height of the **front edge** of the mowing mechanism above the ground. This must be **13–15 mm** and the edges on both sides must be the same.
- ▶ If the height is different, tilt the seat up and, depending on the model of machine, remove either the battery compartment or the tool compartment. Loosen the lock nut (**2**) and turn the nut to adjust the height (**1**). After setting the correct height, don't forget to tighten the nut (**2**).



**6.3.7a**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>▶ As soon as the front edge is at the correct height, place an appropriate washer of the corresponding height underneath it.</li> <li>▶ Check the height of the mowing mechanism's <b>rear edge</b>. It must be <b>10-13 mm</b> higher than the front edge, i.e., <b>23-25 mm</b> above the ground. If the height is incorrect, adjust it by loosening the screw (3) on the mowing mechanism frame. Then retighten the loosened nuts and bolts to 55 – 65 Nm.</li> </ul> | <br><b>6.3.7b</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|

#### ▶ **BALANCING THE MOWING MECHANISM SIDEWAYS**

The mowing mechanism must be properly set **on the sides** (👁 6.3.7c). The left and right sides of the mechanism must be horizontal.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>▶ Loosen the bolts on the left and right sides of the adjustment plate (1).</li> </ul>                                                                                                                                                                                                                                                                                                                      | <br><b>6.3.7d</b> |
| <ul style="list-style-type: none"> <li>▶ Under the mower mechanism cover (2) place inserts of identical height (3) (e.g., wood panels, etc.) and use them to balance the cover such that the left and right sides are equal distance from the ground. The difference between the left and right sides of the cutting mechanism should be <b>no more than 5 mm</b>.</li> <li>▶ Then retighten the loosened nuts and bolts to 55 – 65 Nm.</li> </ul> | <br><b>6.3.7e</b> |

|                                                                                   |                                                                                     |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  | <i>If you are not sure of the procedure, have a service centre do this for you.</i> |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|

### **6.3.8 MOWING MECHANISM - INSPECTION AND ADJUSTMENT OF THE V-BELT**

|                                                                                                                                                                                                                                                                             |                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <p>With time, stress loosens the mowing mechanism's drive belt, and it must be tightened. The belt is tensed by pulleys and springs.</p> <ul style="list-style-type: none"> <li>▶ Transfer the spring (1) to the second hole in the pulley tensioning lever (2).</li> </ul> | <br><b>6.3.8a</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|

### **6.3.9 MOWING MECHANISM - ADJUSTING THE BLADES' TOOTHED DRIVE BELT**

|                                                                                                                                                                                                                                                                                                                                       |                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>▶ Set the mowing mechanism to the lowest position by setting the adjustment lever to position 1.</li> <li>▶ Loosen the bolt on the plastic cover on the right side in the driving direction and lift the cover.</li> </ul>                                                                     | <br><b>6.3.9a</b> |
| <ul style="list-style-type: none"> <li>▶ Under the metal plate, loosen the nut on the tensioning mechanism with the toothed belt (3) such that it can turn with mild resistance from the washer under the nut.</li> <li>▶ Loosen the safety nut (1), turn the nut (2) rightward and check the tension of the toothed belt.</li> </ul> | <br><b>6.3.9b</b> |
| <ul style="list-style-type: none"> <li>▶ The belt is properly tensioned, when exerting <b>4 kPa</b> of pressure halfway between pulleys (3) and (4) the belt sags about <b>0.5 cm</b>.</li> </ul>                                                                                                                                     | <br><b>6.3.9c</b> |

|                                                                                     |                                                                                                            |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
|  | <i>To measure the force, use, for example, a standard dynamometer available in stores that carry them.</i> |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|

- ▶ Tighten the safety nut (1) of the tensioning device and retighten the nut on the tensioning mechanism with the toothed belt (3).
- ▶ Put the plastic cover back on and tighten its mounting bolt.

### **6.3.10 MOWING MECHANISM - REMOVAL**

|                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>▶ Set the mowing mechanism to the lowest position by setting the adjustment lever to position 1.</li> <li>▶ Slightly raise the grass removal tube (1) and slide it off the two pins welded to the frame of the mowing mechanism. Then either slide the tube 10 cm to the rear (2) and secure it, or completely remove it from the machine through the rear plate.</li> </ul> | <br><b>6.3.10a</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|

|                                                                                                                                                     |                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| ▶ Remove the spring (3) from the shoulder of the tension pulley and loosen the spring upward (4).                                                   | <br><b>6.3.10b</b> |
| ▶ Stand on the right side of the machine. Push the tensioner pulley toward the large pulley. This loosens the V-belt. Then remove the belt.         | <br><b>6.3.10c</b> |
| ▶ Remove the cotter pins (5) from the front pins (6) and from both rear pins (7) of the mowing mechanism suspension.                                | <br><b>6.3.10d</b> |
| ▶ Use pliers to remove all pins from the mowing mechanism suspension. When pulling them out, make sure that you don't injure your hands or fingers. | <br><b>6.3.10e</b> |
| ▶ Remove the V-belt from the pulley of the electromagnetic connector.                                                                               | <br><b>6.3.10f</b> |
| ▶ Slowly slide the mowing mechanism to one side of the machine.                                                                                     | <br><b>6.3.10f</b> |

### 6.3.11 STEERING MAINTENANCE

|                                                                                                                                                                                                                                                                                          |                                                                    |                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Regularly check to see that there is no excessive play between the steering rack and pinion. If there is too much play, reduce it.                                                                                                                                                       |                                                                    | <br><b>6.3.11</b> |
|                                                                                                                                                                                                         | <i>Ignoring this maintenance can cause damage to the steering.</i> |                                                                                                      |
| How to adjust the play:<br><br>▶ Loosen the two M12 nuts <b>(1)</b> on the eccentric bolt.<br><br>▶ On the hexagonal eccentric <b>(2)</b> place an appropriate wrench and turn it until the the play is reduced to the minimum.<br><br>▶ Tighten both M12 nuts <b>(1)</b> to 35 - 45 Nm. |                                                                    |                                                                                                      |

### 6.3.12 CHECKING AND ADJUSTING THE DRIVE BELT

|                                                                                                                                                                                                                                                        |                                                                                                                              |                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Regularly check the drive belt tension. The belt is properly tensioned, when exerting <b>4 kPa</b> of pressure halfway between pulleys <b>(1)</b> and <b>(3)</b> and the belt sags about <b>1.5 cm</b> .<br>If the sag is greater, adjust the tension. |                                                                                                                              |  |
|                                                                                                                                                                     | <i>To measure the force, use, for example, a standard dynamometer available in stores that carry them.</i>                   |                                                                                       |
| The positions in the illustration are:<br>(1) The engine pulley<br>(2) The guide pulley<br>(3) The tension pulley<br>(4) The transmission pulley                                                                                                       |                                                                                                                              | <b>6.3.12a</b>                                                                        |
| Adjust belt tension by tightening the nut on the bolt that tenses the tension spring, and then finish the adjustment using the bolt <b>(5)</b> on the pulley <b>(2)</b> so that the spring is stretched to a length of <b>50±1 mm</b> .                |                                                                                                                              |  |
|                                                                                                                                                                     | <b><i>Do not stretch the belt above this threshold. It can shorten the belt's life and even damage the transmission!</i></b> |                                                                                       |

### 6.3.13 REPLACING BELTS

Replacing the drive belt is a relatively demanding procedure and must be entrusted to an authorized service facility.

### 6.3.14 REPLACING WHEELS

Before changing one of the wheels, park the tractor on a solid, level surface, shut off the engine and remove the key from the ignition. Change the wheel as follows:

- ▶ Raise the machine using an appropriate jack on the side on which the wheel is to be changed. Set the jack below a solid part of the machine's frame or on the transmission arm. Secure the machine below with an appropriate wooden block.
- ▶ Remove the protective cover from the wheel (front wheels only).
- ▶ Use an appropriate screwdriver to remove the retaining ring and remove the washer.
- ▶ Take the wheel off the shaft. For rear wheels there is a spring on the shaft.



**6.3.14**

When putting the wheel back on, perform the assembly steps in reverse order. Before installing the wheel, clean all parts, and lightly grease the shaft. Especially for wheels on the rear axle, this greasing is indispensable for later wheel removal. If the shaft is not greased, later assembly may be difficult.

When installing a rear wheel, be careful of the mutual position of the spring on the shaft and the groove in the wheel.

### 6.3.15 REPAIRING TYRE DEFECTS

The machine is equipped with tubeless tyres. If they are defective, entrust their repair to a professional tyre service or to an authorized Seco lawn mower service centre.

### 6.3.16 MAINTAINING THE HYDROSTATIC TRANSMISSION

To ensure reliable operation of the transmission, you must maintain the proper oil level. The transmission filling ports are accessible after removal of the machine's removal tube (📖 **6.3.10**). The prescribed values are shown in the following chart.

| Transmission type | Oil type           | Oil level                                              |
|-------------------|--------------------|--------------------------------------------------------|
| TUFF-TORQ K46     | SAE 10W-30, API CD | at least half the height of the distribution reservoir |
| TUFF-TORQ K62     | SAE 10W-30, API CD | lines 5-7 on the distribution reservoir                |



*If there are problems with the transmission, get immediate help from an authorized service centre to prevent serious damage.*

### 6.3.17 OVERVIEW OF BOLT TORQUE

| Mowing mechanism:                                                                                   | Torque            |
|-----------------------------------------------------------------------------------------------------|-------------------|
| Central blade bolt                                                                                  | <b>30 ± 3 Nm</b>  |
| M12 nuts for the mowing mechanism drive pulleys                                                     | <b>45 - 55 Nm</b> |
| 10x25 KL 100 RIPP bolt for the shoulder of the tensioning pulley of the mowing mechanism drive belt | <b>55 - 65 Nm</b> |
| <b>Steering:</b>                                                                                    |                   |
| M8x30 bolt to the steering section                                                                  | <b>15 - 25 Nm</b> |
| M12 bolt to the steering section                                                                    | <b>35 - 45 Nm</b> |
| <b>Engine:</b>                                                                                      |                   |
| Bolt to the electromagnetic connector                                                               | <b>60 - 70 Nm</b> |
| Bracket screw for the drive belt tension pulley                                                     | <b>25 - 35 Nm</b> |



***Self-locking nuts must be replaced with new ones during removal and reinstallation.***

## 6.4 LUBRICATION

Lubricate the machine according to the following schedule.

The bearings of the tensioning pulleys, guide pulleys and mowing mechanism are self-lubricating.

Before storing the machine for an extended time, thoroughly lubricate all areas shown in the schedule.

| 6.4 | Symbol                                                                            | Explanation       |
|-----|-----------------------------------------------------------------------------------|-------------------|
|     |  | Grease            |
|     |  | SAE 30 oil        |
|     |  | Interval in hours |

### Apply grease to:

- ▶ angle joints of the drive connecting rods - remove and lubricate
- ▶ brake rod bolt - lubricate the rod near the bolt hole
- ▶ bolt to the mowing mechanism lift rod - lubricate the rod in the area of the bolt hole
- ▶ angle joints of the steering connecting rods - remove and lubricate
- ▶ angle joints of the wheel pins - remove and lubricate
- ▶ front wheel bearings
- ▶ wheel pins that go through the axle
- ▶ centre rotary pin of the front axle - through the grease nipple
- ▶ steering wheel shaft bearing - lubricate
- ▶ toothed steering segment and eccentric - lubricate

### Use oil to lubricate the rotating points:

- ▶ axle lock pedal
- ▶ brake pedal

## 7. TROUBLESHOOTING

Never perform a service operation if you do not have the appropriate qualifications and equipment. The operations below can be performed by the user. Service operations other than those shown here will void the warranty when performed by the user. The manufacturer is not liable for damages resulting from the user's poor execution of prohibited service operations.

| Problem                                                 | Solution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>The machine cuts unevenly</b>                        | <ul style="list-style-type: none"> <li>▶ Remove clogged clippings from the underside of the mowing mechanism.</li> <li>▶ Make sure the blades are sharp and not deformed.</li> <li>▶ Check the blade tightness.</li> <li>▶ Check the mowing mechanism's height adjustment. ( <b>6.3.7</b>). If it is not correct, readjust it.</li> <li>▶ Check the tension of the belts ( <b>6.3.8 and 6.3.9</b>). If necessary, adjust the tension.</li> <li>▶ Check the blade shaft. If it is damaged or overly worn, replace it.</li> </ul> |
| <b>A strip remains unmowed between the blade rotors</b> | <ul style="list-style-type: none"> <li>▶ Check for damaged bearings. Repair or replace, if necessary. When mowing thick grass or grass with an excessively wet surface, an unmowed strip may remain. The driving speed should correspond to the right transmission gear for the mowing conditions. The engine should run with a completely open throttle.</li> <li>▶ Make sure the blades are sharp and not deformed. Replace the blades, if necessary.</li> </ul>                                                                                                                                                                                                                                        |

|                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>The mowing mechanism pulls the turf</b>                                              | <ul style="list-style-type: none"> <li>▶ Check the tension of the belts (📖 <b>6.3.8</b> and <b>6.3.9</b>). If necessary, adjust the tension.</li> <li>▶ Check for damaged bearings. Repair or replace, if necessary.</li> <li>▶ Check the mowing height and adjust it, if necessary. Turf is often pulled on uneven terrain.</li> <li>▶ Check to see if the blades are warped. Replace the blades, if necessary.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>The mowing mechanism does not eject the grass</b>                                    | <ul style="list-style-type: none"> <li>▶ Remove clogged clippings from the underside of the mowing mechanism. Under wet conditions, the removal tube and the underside of the mowing mechanism's exit port can be clogged with grass. Do not cut wet grass.</li> <li>▶ The driving speed should correspond to the right transmission gear for the mowing conditions. The engine should run with a completely open throttle. When mowing tall grass, first mow once at a high adjustment and then again at normal height. Abide by the information in chapter <b>5.5.3</b>.</li> <li>▶ Check the tension of the belts (📖 <b>6.3.8</b> and <b>6.3.9</b>). If necessary, adjust the tension.</li> <li>▶ Especially after replacing blades, make sure that the blade is installed correctly.</li> </ul>                                                                                                                                                                                                                                              |
| <b>The mowing mechanism's drive belt stops during operation</b>                         | <ul style="list-style-type: none"> <li>▶ The mowing mechanism's drive belt may be damaged if it jumps out of the pulley during operation. If the belt still jumps out after trying the following steps, it must be replaced.</li> <li>▶ Check the belt tension (📖 <b>6.3.8</b>). If necessary, adjust the tension.</li> <li>▶ Check the belt guide.</li> <li>▶ Check the mowing height, and adjust it if necessary.</li> <li>▶ Check to see if belt movement is being impeded by a foreign object. If it is, remove the object.</li> <li>▶ Double check all pulleys. A bent or broken pulley can cause problems. Replace it, if necessary.</li> <li>▶ Check the inner surface of the pulley on the engine. If it is rough or has cracks, the pulley should be replaced.</li> <li>▶ Check for worn-out parts in the tensioning mechanism, and replace them if necessary.</li> </ul>                                                                                                                                                               |
| <b>The mowing mechanism's drive belt slips</b>                                          | <ul style="list-style-type: none"> <li>▶ If the grass is too tall or wet, the mowing mechanism's belt can slip. Check to see if the belt is worn out. If it is, change it.</li> <li>▶ Check the belt tension (📖 <b>6.3.8</b>). If necessary, adjust the tension.</li> <li>▶ Check the tension spring of the turnbuckle mechanism of the mowing belt. Replace the pulled or damaged spring.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>The mowing mechanism's drive belt wears excessively</b>                              | <ul style="list-style-type: none"> <li>▶ Check all areas of the pulley guide. Check to see if belt movement is being impeded by a foreign object. If it is, remove the object.</li> <li>▶ Check the pulleys, and if they are damaged, replace them.</li> <li>▶ Check the mowing height, and adjust it if necessary.</li> <li>▶ Check the belt tension (📖 <b>6.3.8</b>). If necessary, adjust the tension.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Set the blades in motion</b>                                                         | <ul style="list-style-type: none"> <li>▶ Check to see if the belt is worn out or damaged. If it is, replace it. If it is loose, tighten it.</li> <li>▶ Check the spring on the tensioning mechanism. Replace the broken or damaged spring.</li> <li>▶ Check to see if belt movement is being impeded by a foreign object. If it is, remove the object.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>The blades stop late</b>                                                             | <ul style="list-style-type: none"> <li>▶ Check the belt tension (📖 <b>6.3.8</b>). If necessary, adjust the tension. If the belt cannot be tightened further due to considerable wear, replace it.</li> <li>▶ Check to see if belt movement is being impeded by a foreign object. If it is, remove the object.</li> <li>▶ Check the operation of the electromagnetic connector to see if it shuts off properly. If it malfunctions, have it repaired or replaced by an authorized service facility.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>When the mowing mechanism's drive is turned on, the belt shows extreme vibration</b> | <ul style="list-style-type: none"> <li>▶ Check the blades to see if they are uneven or warped, and also check to see if they are balanced. If they are deformed, replace them.</li> <li>▶ Check to see if the belt has burnt surfaces or irregularities that may lead to vibration. Replace the damaged belt.</li> <li>▶ Check to see if the blades are worn or damaged. Replace them, if necessary.</li> <li>▶ Check the operation of the electromagnetic connector to see if it turns on properly. If it malfunctions, have it repaired or replaced by an authorized service facility.</li> <li>▶ Check the inner surface of the pulley on the engine. If it is rough or has cracks, the pulley should be replaced.</li> <li>▶ Check to see that no grass is lodged under the mowing mechanism. If there is any, remove it.</li> <li>▶ Check to make sure there is no defect in the engine mount. If necessary, tighten or replace the bolts.</li> <li>▶ Check the belt tension (📖 <b>6.3.8</b>). If necessary, adjust the tension.</li> </ul> |
| <b>The driving belt is sliding.</b>                                                     | <ul style="list-style-type: none"> <li>▶ Check the drive belt tension (📖 <b>6.3.12</b>). If necessary, adjust the tension.</li> <li>▶ Check to see if the belt is damaged or worn.</li> <li>▶ Check to see if the drive coupling mechanism is blocked by a foreign object. If it is, remove the object.</li> <li>▶ Check to see if the engine or transmission pulley is damaged. If necessary, replace it.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>The drive belt squeaks.</b>                                                          | <ul style="list-style-type: none"> <li>▶ Check the drive belt tension (📖 <b>6.3.12</b>) and the brake operation. If necessary, adjust the belt tension. If the brake operation is not in order, have an authorized service centre adjust it.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

|                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>The drive belt jumps out during operation</b>                 | <ul style="list-style-type: none"> <li>▶ Check the drive belt tension (📖 <b>6.3.12</b>). If necessary, adjust the tension.</li> <li>▶ Check the belt guide. If necessary, adjust it.</li> <li>▶ Check for damaged pulleys. Replace them, if necessary.</li> <li>▶ Check the space between the drive coupling mechanism. If there are deviations, the coupling pulley support may be bent. Replace it if necessary.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>The machine does not move when the accelerator is pressed</b> | <ul style="list-style-type: none"> <li>▶ Check the drive belt tension (📖 <b>6.3.12</b>). If necessary, adjust the tension.</li> <li>▶ Check the engine and transmission pulleys for sheared or cut grooves. Replace if necessary.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>There is a lot of vibration while driving</b>                 | <ul style="list-style-type: none"> <li>▶ Check for damaged or deformed pulleys. Replace them, if necessary.</li> <li>▶ Check to see if the drive belt has burnt areas or other irregularities. Replace it, if necessary.</li> <li>▶ Check the drive belt tension (📖 <b>6.3.12</b>). If necessary, adjust the tension.</li> <li>▶ Check the balance of the mowing blades. Replace or rebalance them, if necessary.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>The steering slips or is loose.</b>                           | <ul style="list-style-type: none"> <li>▶ Check to see if there is too much play between the segment and the pinion. If there is, adjust the toothed segment. Check for wear to the ball joints. If necessary, replace the joints.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>The engine doesn't run</b>                                    | <ul style="list-style-type: none"> <li>▶ Check to see if there is fuel in the tank.</li> <li>▶ Check to see if the designated engine start-up procedure has been followed (📖 <b>5.2</b>)</li> <li>▶ Check the fuse. If necessary, replace it.</li> <li>▶ Check to see that the battery's pole voltage is <b>12 V</b>. On a new machine, make sure the battery has been activated and charged. On new machines, remove the spark plugs and make sure that the oil hasn't accumulated in the cylinder due to improper handling.</li> <li>▶ Check to see that all wire connectors are in order and that the electrical system's switches are operational.</li> <li>▶ Test the engine exactly according to its manufacturer's user manual. Have the machine's electrical system tested at a professional workshop.</li> </ul> |
| <b>Engine turns but won't fire</b>                               | <ul style="list-style-type: none"> <li>▶ Check to see if the designated engine start-up procedure has been followed (📖 <b>5.2</b>). Check to see if the fuel in the tank is clean.</li> <li>▶ Check to see if the fuel filter is clogged.</li> <li>▶ Check to see if the fuel cap is open (only on BS15.5 engines).</li> <li>▶ Make sure that the fuel lever is in the "STARTER" position.</li> <li>▶ Test the engine exactly according to its manufacturer's user manual. Have the machine's wiring and switches tested at a professional workshop.</li> </ul>                                                                                                                                                                                                                                                           |
| <b>The machine can't be pushed, or only with difficulty</b>      | <ul style="list-style-type: none"> <li>▶ Check to make sure the bypass lever is in the "0" position.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>There is a whistling sound while driving</b>                  | <ul style="list-style-type: none"> <li>▶ Check the belts, and the guide and tensioning pulleys. If the problems persist, seek out an authorized service centre.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## 7.1 ORDERING REPLACEMENT PARTS

We recommend using original replacement parts, which guarantee safety and interchangeability. Always order replacement parts through an authorized dealer or service organization that is informed about the current technical changes to the products during production.

For fast, precise identification of the replacement part you need, always include the serial number on the order form. You will find this number on inside cover of this publication. Also include the production year, which is on the manufacturer's label below the driver seat.

## 7.2 WARRANTY

The warranty requirements are described on the warranty card, which is supplied with your machine at the dealer.

## 8. END-OF-SEASON MAINTENANCE AND STORAGE

After the end of the season or if you will not be using your machine for more than 30 days, prepare it for storage as soon as possible. If fuel remains in the fuel tank for more than 30 days, it may form a sticky sediment, which may hurt the carburettor and cause poor engine performance. Therefore empty the fuel tank.



- **Never store the lawn mower with a full tank of fuel inside a building or in a poorly ventilated area, where there are fuel fumes, open flame, sparks or ignition sources, a furnace, central heating, dry rags, etc. Handle fuels and lubricants carefully. They are highly flammable and careless handling can cause severe burns or property damage.**
- **Empty the fuel tank only into an approved container and outdoors away from open flame.**

#### **Recommended procedure for preparing your machine for storage:**

- ▶ Thoroughly clean the entire machine, especially the interior of the mowing mechanism (📖 6.2.2).



**Do not clean using petrol. Use degreasing agents and warm water.**

- ▶ Repair and repaint chipped paint areas to prevent corrosion.
- ▶ Remove and replace defective or worn-out parts and tighten all loose nuts and bolts.
- ▶ Prepare the engine for storage according to the engine user manual.
- ▶ Lubricate all lubrication points according to the lubrication plan (📖 6.4).
- ▶ Loosen the V-belt of the mowing mechanism (📖 6.3.8)
- ▶ Remove the battery, clean it, fill it with distilled water up to the lower portion of the circle in the filling port, and completely charge it. A drained battery may freeze and burst. If necessary, store the battery in a cool, dry space. Recharge the battery every 30 days and check its charge regularly.
- ▶ Cover the mower with a cloth and store it in a clean, dry room.



*The best way to keep your machine in top operating condition for next season is to have an authorized service centre check and adjust it every year.*

## **9. DISPOSING OF THE MACHINE**

After the machine's operational life is over, the owner is responsible for its disposal. This may be done in two ways:

- a) Handing the machine over to a company that specializes in this work (scrap yard, automotive junkyard, secondary waste collection facility, etc.). You will receive a proper receipt when handing the machine over for disposal.
- b) Disposing of the machine yourself. In that case we recommend following the procedure below:
  - ▶ Dispose of the product by recycling the secondary materials according to waste disposal laws.
  - ▶ Disassemble the entire machine.
  - ▶ Clean, pack and store all parts that can be reused.
  - ▶ Divide the remaining parts into those that are ecologically harmless and those that threaten the environment, such as rubber parts (washers), lubricant residues on bearings or gears. Ecologically harmful components must be discarded according to waste disposal laws applicable in the user's country. For example, in the Czech Republic, it is waste disposal law No. 185/2001 Coll.
  - ▶ Separate discarded refuse according to the waste disposal catalogues in keeping with the applicable decree. Ecologically friendly waste shall be treated as reusable material.

## 10. EC DECLARATION OF CONFORMITY

in accordance with: **Regulation No. 2006/42/EC (government notice NV 176/2008 Coll.)**  
**Regulation No. 2004/108/EC (government notice NV 616/2006 Coll.)**  
**Regulation No. 2000/14/EC (government notice NV 9/2002 Coll.)**

A. We: The Seco Group a.s., Šaldova 408/30, Prague 8  
plant: 02 Jičín, Jungmannova 11  
Org ID: 60193450

**hereby issue the following declaration:**

B. Machine description  
- type of machine: **Self-propelled mower**  
- model: **AJ 102**

Description:

The AJ 102 four-wheeled self-propelled lawn mower with a 15.5-hp; 16-hp; 17.5-hp; 18-hp; 19.5-hp; 20-hp; 21-hp; 22-hp; 23-hp Briggs & Stratton or 16-hp Honda engine. Power from the engine is transferred through an electromagnetic connection by a V-belt to a mowing mechanism and drive transmission. The mowing mechanism has two blades propelled by a toothed belt. Clippings are routed by the tube to the catcher or sent to the ground by the deflector. Instead of collecting the clippings, they can be mulched by using two add-on blades and blocking the removal tube.

C. Regulations by which compliance was judged:  
EN 836+A1;2;3, EN ISO 3767;-1,2,3, ISO 11684, EN ISO 11201,  
EN ISO 12 100-2, Council Directive No. 97/68/EC (2002/88/EC)

D. Compliance evaluation has been performed according to procedures described in:  
- Council Directive No. 2006/42/EC, Article 12, paragraph 2, (equ. § 5, para. 2, NV No. 176/2008 Coll.)  
- Council Directive No. 2004/108/EC, Article 7, (equ. § 4, para. 1, NV No. 616/2006 Coll.)  
- Council Directive No. 2000/14/EC, Appendix VIII, (equ. appendix 7, NV No. 9/2002 Coll.)  
under supervision of a notified person, LRQA registration No. 0088  
Hiramford, Middlemarch Office Village, Siskin Drive  
Coventry CV3 4FJ, United Kingdom

E. We confirm that:  
- this machine as defined in the data provided complies with the requirements given in the aforementioned technical regulations and is safe under conditions of ordinary use.  
- measures have been taken to ensure compliance of all products introduced to the market with the technical documentation and technical regulations.  
- the guaranteed acoustic output level is 100 dB(A).

Average measured levels of acoustic output based on the engine used:

| ENGINE                           | RPM (min <sup>-1</sup> ) | Measured level of acoustic output [dB(A)] |
|----------------------------------|--------------------------|-------------------------------------------|
| Briggs & Stratton 15.5-hp I/C    | 2700±100                 | 99.47                                     |
| Briggs & Stratton 16-hp VANGUARD | 2800±100                 | 97.49                                     |
| Briggs & Stratton 18-hp VANGUARD | 2800±100                 | 97.01                                     |
| Briggs & Stratton 20-hp VANGUARD | 2800±100                 | 97.73                                     |
| Briggs & Stratton 23-hp VANGUARD | 2800±100                 | 98.86                                     |
| Briggs & Stratton 17.5-hp Intek  | 2700±100                 | 99.25                                     |
| Briggs & Stratton 18-hp Intek    | 2800±100                 | 97.49                                     |
| Briggs & Stratton 19.5-hp Intek  | 2800±100                 | 99.04                                     |
| Briggs & Stratton 21-hp Intek    | 2800±100                 | 97.29                                     |
| Briggs & Stratton 22-hp Intek    | 2800±100                 | 98.99                                     |
| HONDA 16-hp                      | 2700±100                 | 98.28                                     |

Technical documentation of the scope required by appendix VII to regulation 2006/42/EC and by appendix V of regulation 2000/14/EC is kept by the manufacturer at the following address:

Seco GROUP a. s.  
závod 02 Jičín  
Jungmannova 11  
506 48 Jičín

In Jičín, October 1, 2009

Jiří Pávek  
member of board

in accordance with: **Council Directive No. 2006/42/EC (government decree NV 176/2008 Coll.)**  
**Council Directive No. 2004/108/EC (government decree NV 616/2006 Coll.)**  
**Council Directive No. 2000/14/EC (government decree NV 9/2002 Coll.)**

A. We: The Seco Group a.s., Šaldova 408/30, Prague 8  
závod 02 Jičín, Jungmannova 11  
Org ID: 60193450

**hereby issue the following declaration:**

B. Machine description  
- type of machine: **Self-propelled mower**  
- model: **AG 122**

**Description:**

The AG 122 is a four-wheeled self-propelled lawn mower with a Briggs & Stratton 18-hp, 20-hp or 22-hp engine. Engine power is transferred through an electromagnetic coupler by V-belts to the mowing mechanism and drive transmission. The mowing mechanism has two blades propelled by a toothed belt. Clippings are routed by the tube to the catcher or sent to the ground by the deflector. Instead of being collected, the clippings can be mulched by using two add-on blades and blocking the removal tube.

C. Regulations by which compliance was judged:  
EN 836+A1;2;3, EN ISO 3767;-1,2,3, ISO 11684, EN ISO 11201,  
EN ISO 12 100-2, Council Directive No. 97/68/EC (2002/88/EC)

D. Compliance evaluation has been performed according to procedures described in:  
- Council Directive No. 2006/42/EC, Article 12, paragraph 2, (equ. § 5, para. 2, NV No. 176/2008 Coll.)  
- Council Directive No. 2004/108/EC, Article 7, (equ. § 4, para. 1, NV No. 616/2006 Coll.)  
- Council Directive No. 2000/14/EC, Appendix VIII, (equ. appendix 7, NV No. 9/2002 Coll.)  
under supervision of a notified person, LRQA registration No. 0088  
Hiramford, Middlemarch Office Village, Siskin Drive  
Coventry CV3 4FJ, United Kingdom

E. We confirm that:  
- this machine as defined in the data provided complies with the requirements given in the aforementioned technical regulations and is safe under conditions of ordinary use.  
- measures have been taken to ensure compliance of all products introduced to the market with the technical documentation and technical regulations.  
- guaranteed acoustic output level is 105 dB(A).

Average measured levels of acoustic output based on the engine used:

| ENGINE                           | RPM (min <sup>-1</sup> ) | Measured level of acoustic output [dB(A)] |
|----------------------------------|--------------------------|-------------------------------------------|
| Briggs & Stratton 18-hp VANGUARD | 3000±100                 | 102.15                                    |
| Briggs & Stratton 20-hp VANGUARD | 3000±100                 | 102.65                                    |
| Briggs & Stratton 20-hp Intek    | 3000±100                 | 101.87                                    |
| Briggs & Stratton 22-hp Intek    | 3000±100                 | 103.42                                    |

In Jičín, October 1, 2009

Jiří Pávek  
member of the board

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**WARNING!**

**ACHTUNG!**

**ATTENTION!**

**ATTENZIONE!**

**WAARSCHUWING!**

**ATENCIÓN!**

**UWAGA**

- This owner's manual must stay with the machine for all its life.
- Dieses Anweisungsheft muß das Gerät während seiner gesamten Lebensdauer begleiten.
- Le manuel doit accompagner la machine pour toute sa vie.
- Questo manuale deve accompagnare la macchina durante tutta la sua vita.
- Deze handleiding dient bij de maaier te blijven gedurende zijn gehele levensduur.
- Este manual del propietario deberá permanecer junto a la máquina durante toda su vida.
- Niniejsza instrukcja obsługi musi być dostępna w pobliżu maszyny podczas całego okresu eksploatacji.

**Producer:**

**Seco GROUP a.s.**

Pobřežní 44/362

Praha 8

**division 02 AGS, Jičín**

Jungmannova 11

50648 Jičín

**CZECH REPUBLIC**



**Distributor:**

EMAK s.p.a. - Via Fermi, 4

42011 Bagnolo in Piano (Reggio Emilia) Italy

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